

# INFORMATIONAL PROPOSAL

(For information only, not to be used for bidding)

NEBRASKA DEPARTMENT OF TRANSPORTATION

LETTING DATE: July 25, 2019

LETTING TIME: 1:30 PM

CALL ORDER: 600

CONTROL NO. SEQ. NO.: 61651 000

TENTATIVE START DATE: 09/03/2019

LOCATION: LAKE McCONAUGHY

IN COUNTY: KEITH

CONTRACT ID: 6651X

PROJECT NO.: SRR-51(61)

CONTRACT TIME: 35 Working Days

DBE GOAL: N/A

PREQUALIFICATION CLASS: 9 - BITUMINOUS

COMBINED BID REQUIREMENTS: N/A

BIDDER

GROUP 9 BITUMINOUS  
GROUP 10 GENERAL ITEMS



Jun 13 2019 DocuSign

## NOTICE TO ALL BIDDERS

To report bid rigging activities, call: 1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free “hotline” Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report such activities.

The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

## LETTING QUESTIONS

Prior to the letting, any questions pertaining to the Special Provisions or the Plans for this project should be submitted to NDOT in a written format through the Bid Express (BidX) website at <https://www.bidx.com/ne/lettings>. Likewise, NDOT will post answers exclusively to the BidX website. All official answers will be identified as “Authorized by NDOT.” **Questions will not be answered verbally.**

**SPECIAL PROVISIONS  
FOR  
STATE  
PROJECT NO. SRR-51(61)**

**GENERAL CONDITIONS**

Bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Transportation in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, at the date and time shown on page 1 of the Proposal.

- a. Bids submitted by mail should be addressed to the Nebraska Department of Transportation, c/o Contract Lettings Section, P.O. Box 94759, Lincoln, NE 68509-4759.
- b. Bids submitted electronically over the internet, shall be submitted using [www.bidx.com](http://www.bidx.com).

Bids will be accepted from Contractors who are prequalified for the Prequalification Class indicated on page 1 of the Bid Proposal.

The 2017 Edition of the Standard Specifications for Highway Construction, including all amendments and additions thereto effective at the date of the contract, are made a part of these Special Provisions, through reference.

The proposal contains a statement that the contractor is complying with, and will continue to comply with, fair labor standards in the pursuit of his business and in the execution of the work contemplated in this proposal.

Fair labor standards shall be construed to mean such a scale of wages and conditions of employment as are paid and maintained by at least fifty percent of the contractors in the same business or field of endeavor as the contractor filing this proposal.

**TRAINING SPECIAL PROVISIONS  
(1-8-0618)**

This On-the-Job Training (OJT) Program was created by the Federal Highway Administration (FHWA) and the Nebraska Department of Transportation (NDOT) to fulfill the Training Special Provisions requirements of federal-aid construction contracts (23 CFR 230, Appendix B to Subpart A). The purpose of the provision is to address the under-representation of minority and female workers in the construction trades through the assignment of OJT training goals. Therefore, the training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision.

Accordingly, the Contractor shall make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment.

All Contractors will be responsible for demonstrating the steps that they have taken to recruit minority and women trainees prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not. The Contractor shall provide on-the-job training aimed at developing full journey-level status in the type of trade or job classification involved. The number of training hours under this Training Special Provision will be assigned to each Contractor as set forth below.

1. Under the NDOT Contractor-Specific On-the-Job Training (OJT) Program, OJT hours will be assigned to Contractors and will not be contract or project specific.
  - a. A Contractor who has received an OJT assignment will be allowed to provide training on any NDOT-let project on which the Contractor is working as either a Prime Contractor or a subcontractor. A Contractor will have the flexibility to transfer trainees from one project to another after providing notification of the transfer to NDOT.
  - b. This project does not have a contract-specific training requirement. NDOT has added a training pay item with a nominal 100-hour quantity, that may overrun or underrun, which will be utilized only if the Contractor elects to provide training on this contract.
2. In January each year, NDOT will allocate OJT assignments to Contractors based on the total average dollar amount of all work performed by a Contractor on NDOT-let projects during the previous three (3) calendar years. The total dollar amount will consist of:
  - a. The total dollar amount of the Contractor's prime contracts let by NDOT (both federal and state funded) minus the total dollar amount of the work subcontracted out to others, and
  - b. The total dollar amount of the subcontract work the Contractor performed for others on NDOT-let projects.

The Contractor's average dollar amount for the previous three calendar years will be calculated, and training hours will then be assigned as follows:

**Three Year Average****Training Assignments**

Under \$2,500,000	0 hours
\$2,500,000 to 5,000,000	1,000 hours
Over \$5,000,000 to 7,500,000	1,500 hours
Over \$7,500,000 to 10,000,000	2,000 hours
Over \$10,000,000 to 15,000,000	3,000 hours
Over \$15,000,000 to 20,000,000	4,000 hours
Over \$20,000,000 to 25,000,000	5,000 hours
Over \$25,000,000 to 30,000,000	6,000 hours
Over \$30,000,000 to 40,000,000	8,000 hours
Over \$40,000,000 to 50,000,000	10,000 hours
Over \$50,000,000 to 60,000,000	12,000 hours
Over \$60,000,000	15,000 hours

**Example:** Contractor A, who averaged \$28.66 million, would be assigned 6,000 hours of OJT. Contractor B, who averaged \$10.33 million, would be assigned 3,000 hours of OJT. Contractor C, who averaged \$2.26 million, would not be assigned any OJT hours.

	2011	2012	2013	3 Year Average	2014 OJT Assignment
Contractor A	24.3	33.4	28.3	28.66	6,000 hours
Contractor B	9.3	11.9	9.8	10.33	3,000 hours
Contractor C	2.3	1.4	3.1	2.26	0 hours

3. The OJT hours assigned to a Contractor in January are to be completed during that calendar year (e.g., OJT hours assigned in January of 2014 are to be completed during the period of January 1, 2014 thru December 31, 2014).
  - a. If a Contractor exceeds the number of OJT hours assigned for a calendar year, the Contractor may request to bank up to 30 percent of the excess hours. Banked hours may then be credited toward the Contractor's OJT assignment for the next calendar year.
4. Completion of the annual OJT assignment is the Contractor's responsibility. The Contractor is not allowed to assign any of the OJT hours to any other Contractor. The Contractor must make a Good Faith Effort to enroll an adequate number of trainees and provide the trainees a sufficient number of hours training to achieve the Contractor's annual OJT assignment.
5. While trainees may be assigned to NDOT-let federally or state funded projects, the Contractor should attempt to schedule and assign trainees so that at least 50 percent of a trainee's hours are earned on federally funded projects - unless otherwise approved in advance by NDOT.
6. The Contractor must use an OJT program approved by NDOT and/or the FHWA. An OJT program shall be approved if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and qualify the average trainee for journey-level status in the job classification concerned by the end of the training period.

An approved OJT program must specify the number of hours required for a trainee to achieve journey-level status in each job classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, shall also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts.

7. The Contractor shall furnish each trainee a copy of the OJT Program he/she will follow in providing the training. The Contractor shall also provide each trainee with a certification showing the type and length of training satisfactorily completed.
8. The Contractor's Equal Employment Opportunity (EEO) Officer shall be responsible for administering the Contractor's OJT and monitoring the trainees' progress. The EEO Officer shall serve as the point of contact for NDOT regarding OJT information, documentation, and conflict resolution. If necessary, the EEO Officer may designate another individual to assist with the OJT monitoring responsibilities. NDOT must be provided the name and contact information for any such designee.
9. At least seven (7) days prior to commencing training, the Contractor must submit a "Request for Trainee Approval" form to NDOT for each individual to be enrolled as a trainee and a tentative list of the projects to which the trainee will be assigned. Requests for Trainee Approval may be submitted by mail, fax, or email.
10. If the Contractor submits a "Request for Trainee Approval" form to NDOT for an individual who is not a minority or female, or cannot replace departing trainees with minorities or females, the Contractor must also produce sufficient Good Faith Efforts documentation of the type set forth below. NDOT may reject non-minority male trainees for entry into the program if it determines that a Contractor failed to make sufficient Good Faith Efforts to hire minorities or female trainees and/or the Contractor failed to document or submit evidence of its Good Faith Efforts to do so.
11. Any training hours provided to a trainee prior to the Contractor receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.
12. When an individual is first enrolled as a trainee, the individual will be approved for the number of hours of OJT required to achieve journey-level status in the classification for which the individual is to receive training. (A Contractor will not be penalized if a trainee does not achieve the full number of hours for which the trainee is approved.)
13. If the Contractor is unable to provide a trainee the full number of training hours required to achieve journey-level status on one project, the trainee should be transferred to other NDOT-let projects on which the Contractor is working.
14. At least one (1) day before all such transfers of trainees are made, the Contractor must provide NDOT in writing the name of the trainee and current project, the project to which the trainee will be transferred, and when the transfer is to take place. Notifications of trainee transfers may be submitted by mail, fax, or email.

15. Any training hours provided to a transferred trainee prior to the Contractor having notified NDOT of the transfer will not be credited toward the Contractor's annual OJT assignment.
16. No individual may be employed as a trainee in any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level. No individual may be employed as a trainee in any classification with a lower skill level than any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level (e.g., an individual who has achieved journey-level status as an equipment operator may not be trained as a laborer). The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

An individual may be trained in multiple classifications that require relatively equal skill levels but different skill sets (e.g., an individual who has received training as a milling machine operator may also receive training as a roller operator, or a scraper operator, etc.). Preferably, an individual should have achieved journey-level status in a classification before beginning training in another classification.

The Contractor must request and receive approval from NDOT for an individual to receive training in a classification other than the classification for which the individual was originally approved. Any training hours provided prior to receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.

17. Training shall be provided in construction crafts rather than clerk-typist or secretarial-type positions. Training is permissible in positions that are not assigned to a specific project such as office engineers, estimators, timekeepers, shop mechanics, etc., if the selected OJT program includes these classifications. Training in such positions will not be eligible for reimbursement, but will be eligible to be credited toward the Contractor's annual OJT assignment.
18. Some off-site training is permissible as long as the training is an integral part of an approved OJT program and does not comprise a significant part of the overall training (e.g., 16 hours training per trainee per year in areas such as jobsite safety or accident response would be permissible). A copy of a training certificate, agenda, or curriculum must be provided to verify off-site training.
19. The Contractor will be reimbursed \$2.00 per each hour of training provided in accordance with an approved OJT program and the NDOT Training Special Provisions.
20. Contractors shall be allowed to transfer trainees or utilize trainees on other NDOT-let projects which do not contain the Training Special Provisions. NDOT will utilize a Change Order / Supplemental Agreement to incorporate the Training Special Provisions and the appropriate pay item into the contracts of such projects.
21. On all federally funded NDOT-let projects, trainees must be paid at least 60 percent of the appropriate minimum journey-level rate specified in the contract for the first half of the training period, 75 percent for the third quarter, and 90 percent for the last quarter of the training period - or the appropriate rates approved by the U.S. Department of Labor

or the U.S. Department of Transportation in connection with the program in which the trainee is enrolled.

22. In order to document and evaluate a trainee's progress toward journey-level status, the Contractor must provide NDOT at the end of each month a "Special Training Provision Monthly On-The-Job Training Report" listing each trainee, the number of hours trained during the month, and the total number of hours trained as of the date of the report.

**NOTE:** The monthly reporting requirements may change if/when on-line reporting is implemented by NDOT.

23. If a trainee's employment is terminated for any reason prior to completion of the number of OJT hours for which the individual was approved, the Contractor must make Good Faith Efforts to replace the trainee with another minority or female.
24. Contractors must submit an annual summary report to NDOT by January 15<sup>th</sup> each year giving an account of all trainee hours provided during the previous year. The report shall show a breakdown of training provided on each project and/or contract.
25. Contractors will have fulfilled their OJT responsibilities if they have provided acceptable training for the number of hours assigned, or have demonstrated that they made a Good Faith Effort to provide the number of OJT hours assigned. Where a Contractor cannot meet his or her annual training hour goal with females and minorities, the Contractor remains responsible for demonstrating the Good Faith Efforts taken in pursuance of the goal. Examples of what actions constitute Good Faith Efforts are set forth below. NDOT will make compliance determinations regarding the Training Special Provisions based upon either attainment of the annual goal or Good Faith Efforts to meet it.
26. Good Faith Efforts are those designed to achieve equal opportunity through positive, aggressive, and continuous results-oriented measures (23 CFR § 230.409(g)(4)). Good Faith Efforts should be taken as trainee-hiring opportunities arise and when minorities and women are under-represented in the Contractor's workforce. NDOT will consider all Contractors' documentation of Good Faith Efforts on a case-by-case basis and take into account the following:
  - a. Availability of minorities, females, and disadvantaged persons for training;
  - b. The potential for effective training;
  - c. Duration of the contract;
  - d. Dollar value of the contract;
  - e. Total normal work force that the average Contractor could be expected to use;
  - f. Geographic location;
  - g. Type of work;
  - h. The need for journey level individuals in the area.

Good Faith Efforts may include, but are not limited to, documentation of efforts to:

- Contact minority and female employees to gain referrals on other minority and female applicants;
- Refer specific minorities and females to training programs and specifically request these trainees by name in the future;
- Upgrade minority and female unskilled workers into the skilled classifications when possible;
- Accept applications at the project site or at the Contractor's home office;
- Review and follow up on previously received applications from minorities and females when hiring opportunities arise;
- Maintain monthly evaluations that monitor efforts made to achieve diversity in the Contractor's workforce in general (i.e., significant numbers of minorities and females employed on a company-wide basis);
- Provide incentives for project management personnel or superintendents when hiring goals are met on a project (i.e., similar to performance bonuses paid when a job is completed in a timely manner and under budget).

27. Liquidated damages will be assessed the Contractor for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment or for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment with minority and women trainees.

Liquidated damages will be assessed at the rate of \$4.00 per hour for the number of OJT hours not achieved or, even if achieved, the number of OJT hours in which the Contractor fails to demonstrate Good Faith Efforts to hire minorities and women. (e.g., if the Contractor was assigned 3,000 hours but only achieved 2,000 hours and did not demonstrate a Good Faith Effort, the liquidated damages would be assessed at 1,000 hours x \$4.00 = \$4,000.00.)

28. NDOT will invoice a Contractor for liquidated damages assessed as a result of the Contractor's failure to demonstrate a Good Faith Effort to achieve the number of OJT hours assigned.

The Contractor's failure to promptly pay any invoice for liquidated damages may result in the Contractor being disqualified to bid work with NDOT for a time period determined by the Director/State Engineer.

29. At the end of the calendar year, if the dollar amount of work the Contractor performed on NDOT-let projects is substantially below the three-year average upon which the Contractor's OJT assignment was based, the Contractor's OJT goal for that year may be adjusted according to the table in Paragraph 2. above.

30. The established per hour unit price for the item "Training" shall be full compensation for all costs incurred, which includes but is not limited to providing the necessary supervision, labor, equipment, tools and material. Any additional costs due to payment

of wages in excess of the minimum rates specified and for the payment of any fringe benefits shall not be paid for directly, but shall be considered subsidiary to the items for which direct payment is made.

### **AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS**

The last sentence under Paragraph C., on Page 5 of the Standard Federal Equal Employment Opportunity Construction Contract Specifications, dated November 3, 1980, is void.

FHWA Form 1409 "Federal-aid Highway Construction Contractor's Semi-Annual Training Report" is not required.

### **STATUS OF UTILITIES**

The following information is current as of May 29, 2019.

Aerial and/or underground utility facilities may exist within this project. The Contractor should request a utility status update at the preconstruction conference, and/or prior to starting work.

Any utility adjustments or interruption of service for the convenience of the Contractor shall be the sole responsibility of the Contractor.

To arrange for utilities to locate and flag their underground facilities, contact Diggers Hotline of Nebraska at 1-800-331-5666, or dial 811.

Coordinate with Colby Johnson to identify Utilities on Game and Parks Property.

Colby Johnson  
Regional Park Superintendent  
Office: 308-284-8804  
Cell: 308-289-6955

All utility rehabilitation will be accomplished prior to or concurrent with construction.

### **STATUS OF RIGHT-OF-WAY (1-14-1217)**

All necessary right-of-way has been acquired for this project.

**SPECIAL PROSECUTION AND PROGRESS  
(Weight Restrictions/Asphaltic Concrete Placement)**

A Material Transfer Vehicle (MTV) will not be permitted for use on this project.

**SPECIAL PROSECUTION AND PROGRESS  
(Milling/Asphaltic Concrete Placement)**

Asphalt patching shall be done prior to milling the roadway.

Asphalt shall be placed the same day the surface is milled.

Milling and asphalt placement shall not damage the existing asphalt curb, to prevent damage to the curb, the Contractor has the option to offset milling and asphalt placement up to 6 inches from the face of the asphalt curb.

If Bituminous Sand Base Course is encountered during the milling operation, the depth of milling shall be reduced.

**SPECIAL PROSECUTION AND PROGRESS  
(General Requirements)**

1. This project shall be constructed in 2019.
2. If the Contractor elects to start work prior to Labor Day holiday, all work will be suspended from August 30, 2019 to September 2, 2019. All lanes of traffic shall be open & all temporary traffic control devices removed from the roadway.
3. No fog seal shall occur prior to the Labor Day holiday weekend. The Contractor will notify the Engineer at least 14 calendar days prior to starting the fog seal operations at Lone Eagle and Little Thunder Bay campgrounds.
4. Traffic will not be allowed on any milled asphaltic concrete surface.

**SPECIAL PROSECUTION AND PROGRESS  
(Coordination with Others)**

The Contractor for this project shall be required to coordinate signing and construction activities with the Contractor for Project STP-92-1(127), CN 60603, Lewellen – Lemoyne, which is tentatively scheduled to begin construction on June 24, 2019. This project consists of cold milling and asphalt overlay.

### **INFORMAL PARTNERING**

The Contractor will be required to participate in partnering meetings for this project.

The prime Contractor and applicable Subcontractors will be required to attend regularly scheduled weekly meetings with the Engineer's staff & NE Game and Parks officials to discuss the work schedule for the upcoming week, to resolve any problems encountered, and to coordinate the work so there is minimum disruptions to the public.

Informal partnering will not be measured for payment and shall be considered subsidiary to other items of work for which direct payment is made, as per Section 113 of the NDOT Standard Specifications

## STATUS OF ENVIRONMENTAL COMMITMENTS

Control No. 61651  
Project No. 51(61)  
Project Name: Lake McConaughy

**404 Permit Required** ☐ Yes  
☒ No

Comments: No 404 permit required.

**Individual 401 Water Quality Certification Required** ☐ Yes  
☒ No

**State Title 117 Waters (COE Non-Jurisdictional)** ☐ Yes  
☒ No

**Floodplain Permit Required** ☐ Yes  
☒ No

Comments: No floodplain permit required.

**Historic Clearance** ☒ Yes Tier I Approved 2/25/2019  
☐ No

Comments: No potential to cause effects to historic properties.

**Threatened & Endangered Species Clearance Required** ☒ Yes FHWA – 2/8/2019  
Approved: NGPC – 2/1/2019  
☐ No USFWS – NA

Comments: May Affect, Not Likely to Adversely Affect

**Environmental Clearance** ☐ Yes  
☒ N/A

Comments: State Funds Only

**NPDES/Stormwater Permit No.:** NA

**Special Provisions:** See attached Environmental Commitments

I have compared environmental documentation and project correspondence with the attached environmental commitments and found them to be accurate and complete.

TRU UH *ED 4/24/19* TSE PM *SS 4/24/19* EDU UH *21 4/24/19* EDU PM *Q 4/24/19* DISU UH *PR 4/24/19* TRU PM *SH 4/24/19* LPS PM *PK 4/30/19*  
(Initial) (Date) (Initial) (Date) (Initial) (Date) (Initial) (Date) (Initial) (Date) (Initial) (Date) (Initial) (Date)

## ENVIRONMENTAL COMMITMENTS

**Control No.:** 61651      **Project No.:** 51(61)  
**Project Name:** Lake McConaughy

Below are the Conservation Conditions that will be required for this project. All conditions and regulations of any permit obtained for this project will be followed by the Contractor.

**(Responsible Party for the measure is found in parentheses)**

### Conservation Measure for Environmentally Sensitive Areas

The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear “bed and bank” channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas. (Contractor, NDOT District)

- **Attachment 1** includes the NDOT Wetland Fact Sheet and map(s) of potential wetlands and/or other potential regulated waters features. These features were identified from a desktop review of published resources. The above condition pertains to the areas as listed on Attachment 1. If access to any of these areas is required to complete the project construction, the NDOT construction project manager shall coordinate with the Technical Resources Unit to determine need for field verification and/or permitting requirements prior to disturbance of the area. (Contractor, District Construction)

Contact Person: Brett Harbison, Highway Environmental Biologist, (402) 479-3818

### General Conservation Conditions

**Changes in Project Scope.** If there is a change in the project scope, the project limits, or environmental commitments, the NDOT Environmental Section must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction, Contractor)

**Threatened and Endangered Species.** The Contractor shall reference the Nebraska Game and Parks Commission website for a reference of federal and state listed species that may occur in the project vicinity prior to starting project construction. These guidance documents can be found at:

- [http://www.agcne.org/services/es\\_guide.htm](http://www.agcne.org/services/es_guide.htm)
- [http://outdoornebraska.ne.gov/wildlife/programs/nongame/Endangered\\_Threatened.asp](http://outdoornebraska.ne.gov/wildlife/programs/nongame/Endangered_Threatened.asp)

If federal or state listed species are observed during construction, stop work and contact the NDOT Environmental Section to determine action required prior to resuming work. (NDOT Environmental, District Construction, Contractor)

**Refueling.** Refueling will be conducted within the confines of the paved roadway surface or within the boundaries of an approved stockpile/staging site. (Contractor)

**Restricted Activities.** The following project activities shall, to the extent possible, be restricted to between the beginning and ending points of the project, within the right-of-way designated on the project plans.

- Borrow sites
- Construction debris waste disposal areas
- Asphalt plants
- Haul roads
- Stockpiling areas
- Staging areas
- Material storage sites

Any project related activities that occur outside of the project limits (includes the paved surface and within 12 inches of the paved surface) must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the Contractor and those clearances/permits shall be submitted to the District Construction Project Manager prior to the start of the above listed project activities. The Contractor shall submit a NDOT Plant Site/Stockpile Site Request Identification and Evaluation Form (NDOT Form 56) and/or a Borrow Site/Waste Site Request Identification and Evaluation Form (NDOT Form 119) as appropriate, and include information such as an aerial photo showing the proposed activity site, a plan-sheet or drawing showing the location and dimensions of the activity site, ground photos showing the existing conditions at the proposed activity site, etc. The Contractor must receive notice of acceptance from NDOT, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. Fill cannot be placed in Wetland, Stream or other Waters of the U.S. without authorization. (NDOT Environmental, District Construction, Contractor)

**Waste/Debris.** Construction waste/debris will be disposed of in areas or a manner, which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

#### **Interior Least Tern and Piping Plover**

**ILT/PP-1** For construction activities that begin prior to April 15 and continue beyond April 15, surveys will be conducted starting April 8 and continue through the end of construction or August 15, whichever comes first. NDOT Environmental, NDOT trained personnel, or a qualified biologist, will conduct surveys according to protocol at the following locations: length of project. If species are present, the District will notify the Contractor to stop work within ¼ mile of nesting activities and follow the protocol to determine when work can resume. (NDOT Environmental, District, Contractor)

**OR**

**ILT/PP-2** When initiating construction activities between April 15 and August 15, surveys will start one week prior to construction activities and will continue through the end of construction or August 15<sup>th</sup>, whichever comes first. NDOT trained personnel, or a qualified biologist, will conduct surveys according to protocol at the following locations: length of project. If species are present, the District will notify the Contractor to stop work within 1/4-mile of nesting activities and follow the protocol to determine when work can resume. (NDOT Environmental, District, Contractor)

**AND**

**ILT/PP-4** Herbaceous species used for re-seeding within 1/4-mile of the following location: **length of project** will be native grass or forb species. Native shrub or woody species used in restoration should reach no more than 4 feet in height at maturity. (Design)

**R-4** For the **interior least tern** and **piping plover**, nighttime work with lights from April 15 – August 15 is not authorized. If nighttime work is required during this timeframe, the Contractor will notify the District and the District will request approval from NDOT Environmental Section at least 10 working days prior to construction so consultation with the USFWS and NGPC can be initiated. Surveys may be required to determine if nesting birds are present within 1/2-mile of the nighttime activity. Approval from these agencies is required. (NDOT Environmental, District Construction, Contractor)

#### **River Otter**

**RO-1** A qualified biologist will survey according to protocol no more than 10 days prior to construction. If no active den sites are found, then the project can proceed. If active den sites are found, NDOT Environmental Section will notify the District and will consult with the USFWS and NGPC. If species are present, the District will notify the Contractor to stop work within 1/2-mile of the active den until NDOT Environmental completes consultation. (NDOT Environmental, District Construction, Contractor)

#### **Whooping Crane**

**WC-1** Construction activities will not occur during Whooping Crane migration periods. (Spring migration: March 6 – April 29; and fall migration: October 9 – November 15). (NDOT Environmental, Construction, Contractor)

#### **OR**

**WC-2** If construction activities occur during Whooping Crane migration periods (Spring migration: March 6 – April 29; and fall migration: October 9 – November 15), NDOT trained personnel, or a qualified biologist, will conduct surveys according to protocol at the following locations: **length of project** **(prior to the start of daily construction activities)**. If species are present the District will notify the Contractor to stop work within 1/2-mile of the whooping crane and follow the protocol to determine when work can resume **(also not initiate work if species is found in the morning survey)**. Options for resuming work may include but are not limited to: (NDOT Environmental, Construction, Contractor)

- Construction activities are limited to the hours from 10:00 a.m. to 4:00 p.m. (CST) during the migration period, unless morning survey indicates Whooping Cranes are not present.
- If a whooping crane is observed during the survey within 1/2-mile of the project but departs the area (further than 1/2-mile from the project), then work can resume. Document this departure according to protocol.

#### **AND**

**WC-3** Herbaceous species used for re-seeding within 1/4-mile of the following location: **length of project** will be native grass or forb species. Native shrub or woody species

used in restoration should reach no more than 4 feet in height at maturity. (Design, NDOT Environmental)

- R-11** For the **whooping crane**, nighttime work with lights from March 6 – April 29 and October 9 – November 15 is not authorized. If nighttime work is required during this timeframe, the Contractor will notify the District and the District will request approval from NDOT Environmental Section at least 10 working days prior to construction so consultation with the USFWS and NGPC can be initiated. Approval from these agencies is required. (NDOT Environmental, District Construction, Contractor)

### **Bald Eagles**

- Suitable **Bald Eagle** nesting and/or roosting habitat exists within 0.5 miles of the Environmental Study Area. If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However, a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If bald eagles are nesting in the area, consultation with NGPC and USFWS will be required prior to beginning construction activities. Eagle roosting surveys will be conducted if construction occurs between October 1 and January 31. (NDOT Environmental, Contractor)

**NDOT Construction Project Managers should contact NDOT Environmental at 402-479-3546 or [jon.soper@nebraska.gov](mailto:jon.soper@nebraska.gov) at least 30 days prior to construction start to schedule River Otter and Bald Eagle surveys.**

Contact Person: Jon Soper, Highway Environmental Biologist, (402) 479-3546

### **LWCF Act – Martin Bay Recreation Area**

Access to the LWCF encumbered property must be maintained for public use of the property during project construction. Any equipment, materials, etc. planned to be staged or stored on the LWCF encumbered property or any project construction activities temporarily or permanently altering the use of the property (e.g., easements or taking or right-of-way, etc.), other than “outdoor recreational use”, needs to be coordinated through Nebraska Game and Parks Commission headquarters.

### **Encountering Unexpected Waste**

If contaminated soils/water or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the NDOT Construction Project Manager (CPM). The Contractor shall not re-enter the discovery area until allowed to do so by the CPM. At the time of discovery, the CPM and Contractor shall utilize the *NDOT Unexpected Waste Action Plan (UWAP)* to coordinate appropriate actions. The actions to be carried out by the NDOT CPM are (but not limited to): verification that the Contractor has suspended construction activities in the area of the discovery, contact the Environmental Section Manager and make an entry into Site Manager that an unexpected waste discovery was made. The CPM shall then utilize the UWAP Site Discovery Check List to properly document the extent and type of waste. The CPM shall ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. The Contractor is required by NDOT's Standard Specification Section 107 (legal relations and responsibilities to the public) to handle and dispose of regulated material in accordance with applicable laws. (Contractor)

Contact Person: Caroline Jezierski, Highway Environmental Biologist, (402) 479-4415

**Construction Stormwater**

This project does not require a Construction Stormwater Permit or a Storm Water Pollution Prevention Plan (SWPPP). Temporary water pollution prevention practices (including sediment and erosion control measures) are still required by Nebraska State Title 119. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent sedimentation within rivers, streams, impoundments (lakes, reservoirs, etc.), the project site, and adjacent property. (Contractor)

Contact Person: Ron Poe, Highway Environmental Program Manager, (402) 479-4499

# Attachment 1

## NDOT Wetland Fact Sheet

### What are Wetlands?

- Wetlands are saturated land such as marshes, lakes, river and stream backwaters, oxbows, wet meadows, forested swamps, seeps, and other similar areas.
- Water usually covers the soil, or is near the surface of the soil for varying periods of time.
- Under normal conditions, this prolonged presence of water favors the growth of specially adapted plants and promotes the development of wetland soils.

### Where are wetlands found?

- Wetlands are found where there is a water source (streams, groundwater, and precipitation runoff) to support growth of wetland plants and the development of wetland soils.
- In the NDOT Right-of-Way, likely wetland locations include:
  - Culvert inlets/outlets
  - Depressions (lower elevation)
  - Roadside ditches
  - Flat meadows
  - Base of slopes or hills
  - Within streams and along stream fringes

### What do wetlands look like?

- Wetland areas can generally be identified by a distinct difference in vegetation (at lower elevations) from the surrounding upland area.
  - Taller, darker green, more lush vegetation
  - Sparser vegetation, open mud areas, at lower elevation
- Wetlands can be dominated by grasses, forbs, shrubs, or trees
- Wetland vegetation could include:
  - Reed canary grass
  - Cattails
  - Sedges
  - Rushes
  - Bulrush
  - Arrowhead
  - Ricecut Grass
  - Prairie cordgrass
  - Barnyard grass
  - Smartweed
  - Trees & shrubs
    - Green Ash
    - Willows
    - Cottonwood

### What do I do if there are wetlands and/or streams in the NDOT R.O.W.?

The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear "bed and Bank" channel. These locations are avoidance areas. Contractor must comply with all USACE Section 404 Permit requirements.

### Who do I contact with questions?

Please contact the project's NDOT Wetland Highway Environmental Biologist:

Brett Harbison

402-479-3818

brett.harbison@nebraska.gov

CN 61651; SRR-51(61)  
Lake McConaughy

# Attachment 1



Wet meadow extending from the NDOT R.O.W.



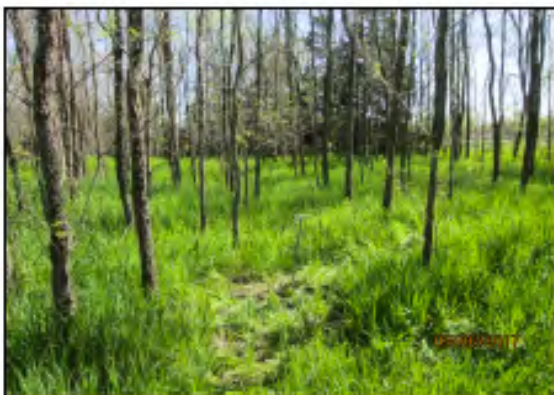
Reed Canarygrass wetland in roadside ditch



Fringe wetlands around stream



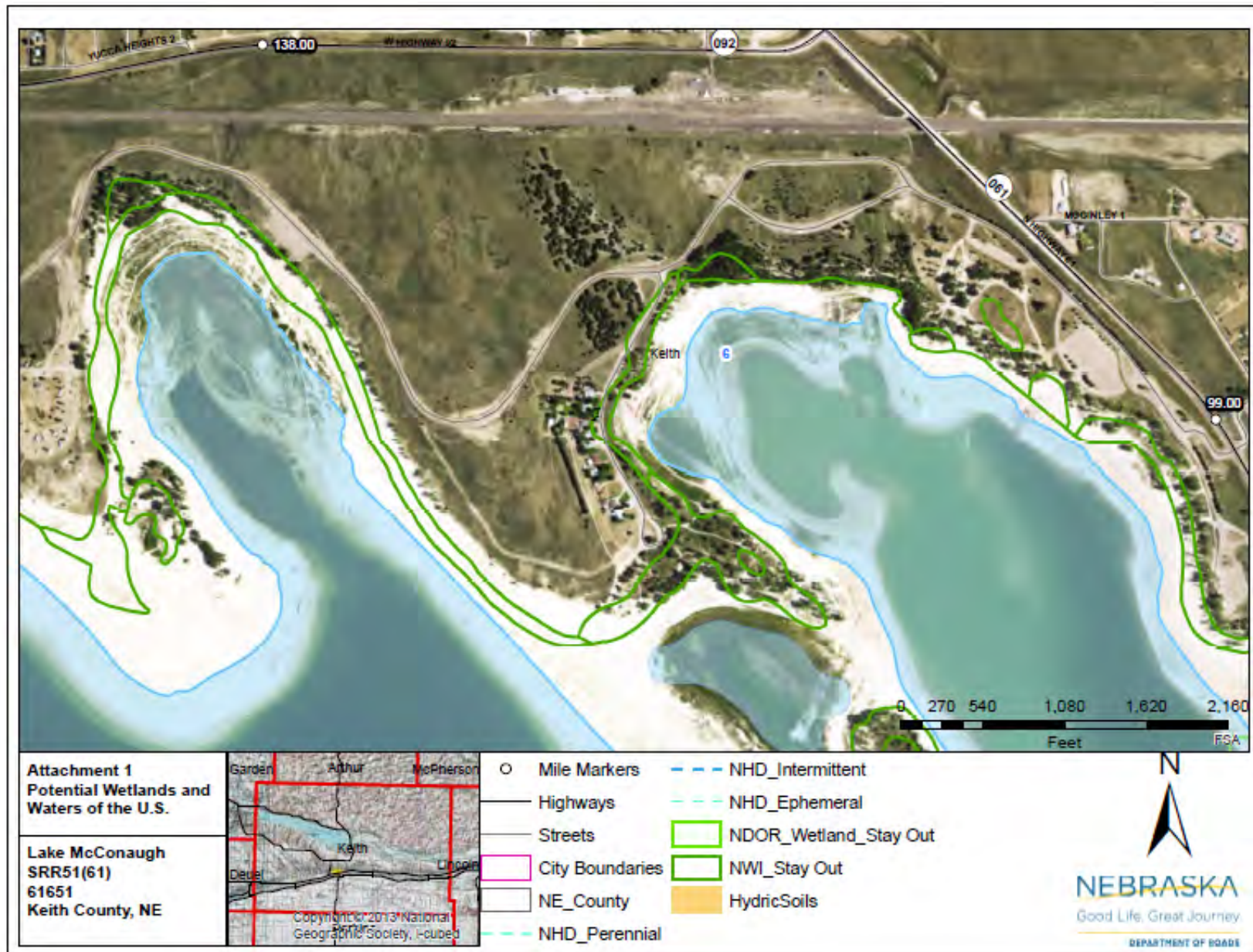
Cattail wetland at culvert

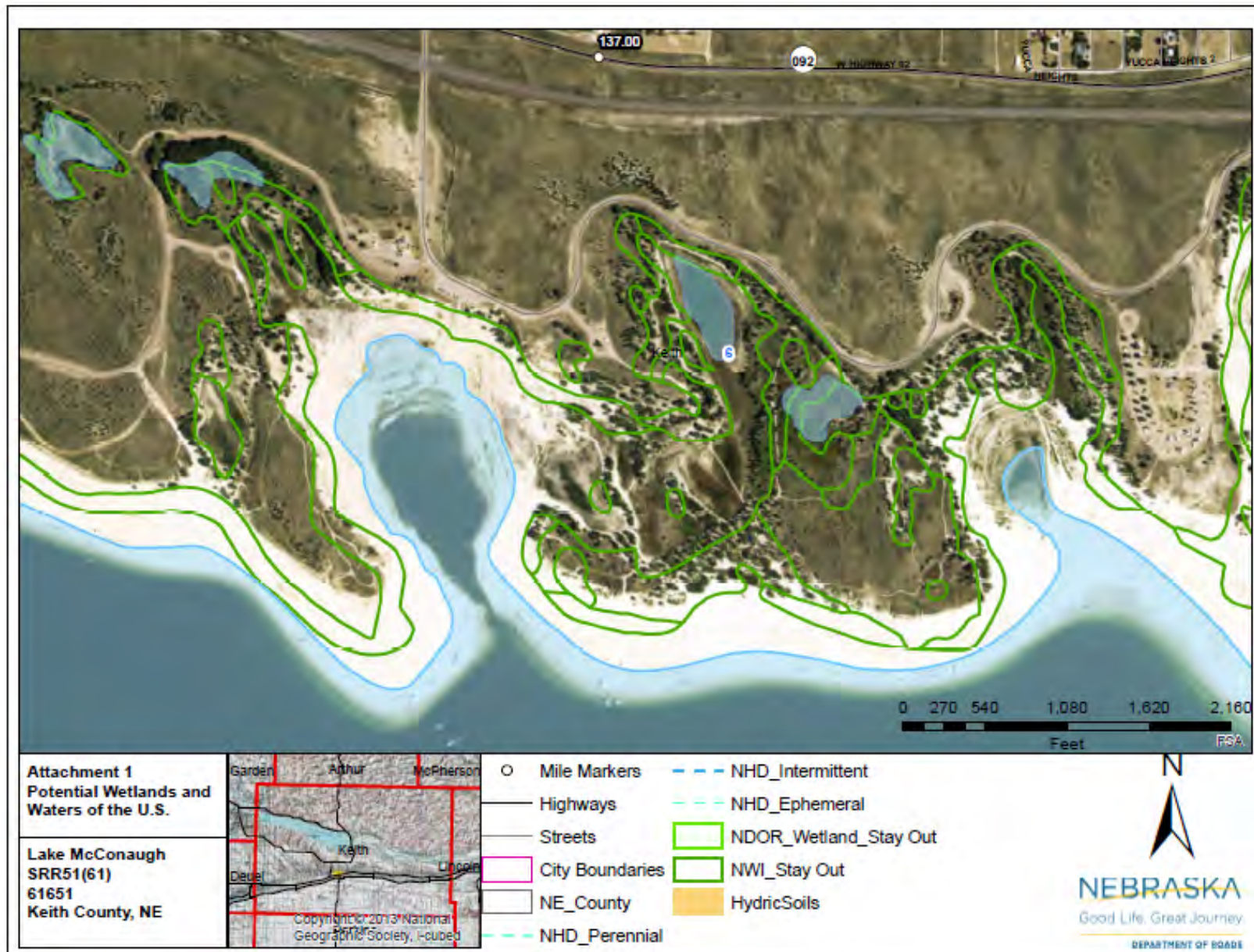


Forested wetland

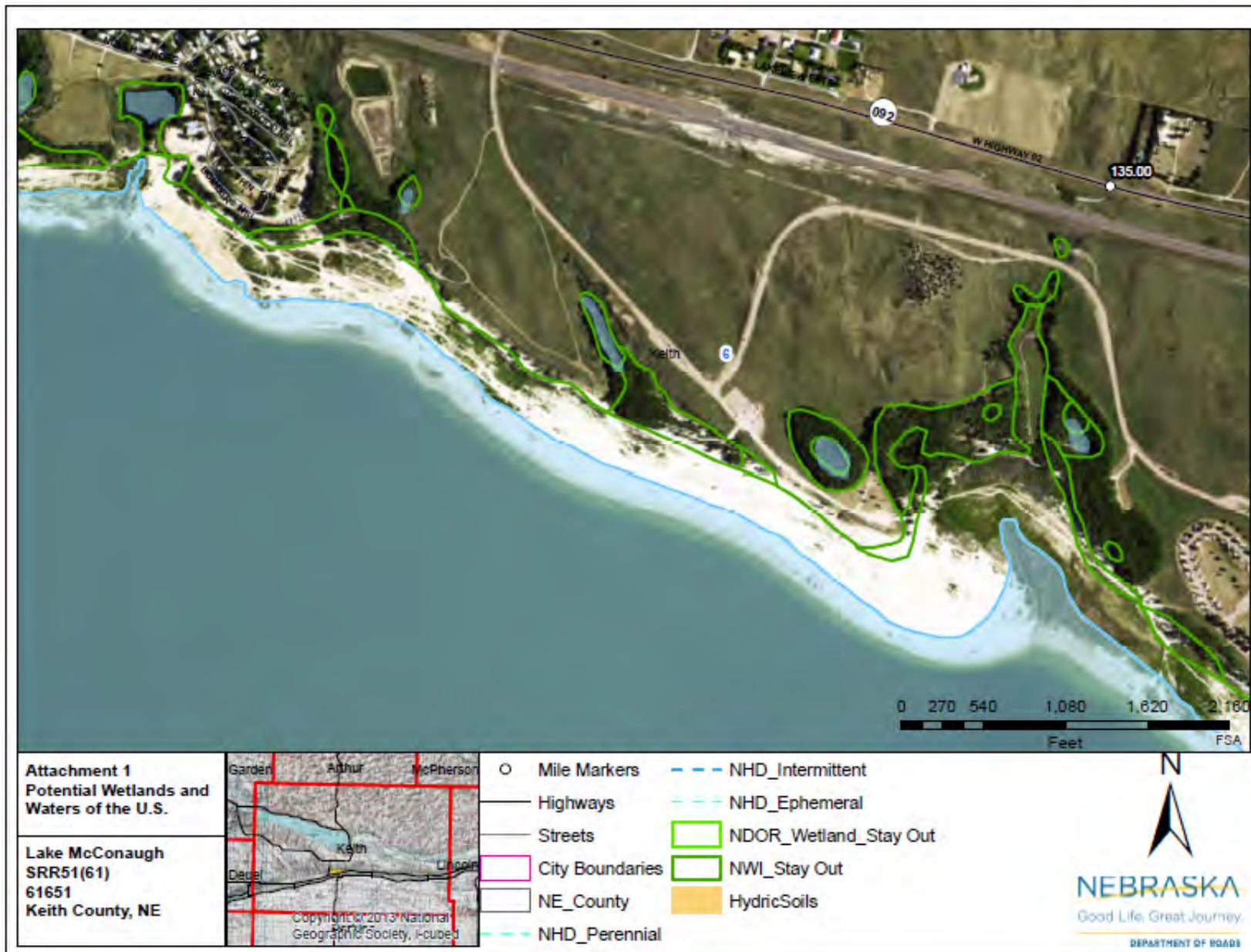


Willow shrub wetland









## Interior Least Tern & Piping Plover Fact Sheet

Piping plovers (*Charadrius melodus*) and Interior Least Terns (*Sterna antillarum*) are small water birds that nest on a sandy-gravelly substrate. Their natural nesting habitat in Nebraska is high, dry, barren mid-stream sandbars within rivers. Terns and plovers also nest on artificial substrate, mainly sand spoils produced as a byproduct of sand and gravel mining.

### Piping Plover (*Charadrius melodus*)

Order: *Charadriiformes*

Family: *Charadriidae*

Status: State and Federally Threatened



Foraging Piping Plover



Piping Plover on Nest



Piping Plover Chick

The Piping Plover was listed in the Federal Register on December 11, 1985, as Endangered. It has since been de-listed to Threatened in Nebraska (Information from U.S. Fish and Wildlife Service)

**Description:** L 7 1/4" (18 cm). Sexes similar. Very pale above, white below. In breeding plumage has single complete black breast band. Sometimes the breast band can be incomplete, especially in females and juveniles. White forehead and small black cap. Legs are orange. Bill is yellow with black tip.

**Habitat:** Sparsely vegetated shorelines of shallow water bodies. Prefer shorelines with bare sand, and sandy or pebbly mud. Plovers generally nest on unvegetated or sparsely vegetated sandbars in river channels.

**Status/Range:** Occasional to rare spring and fall migrant and rare local summer resident. Have recent breeding records for Platte, Niobrara, Loup, and Middle Loup Rivers and at Lake McConaughy and recently at Lake Minatare. **Call:** Clear piping "peep-lo." **Comments:** Surveys in 1996 indicate that nearly 300 pairs of Piping Plovers bred in the state. (Information provided from Nebraska Game and Parks Commission website)

**Courtship Behaviors:** Males perform courtship flights over breeding territory, with slow wing beats and piping call note. On the ground, male approaches female, stands upright with neck stretched, and rapidly stamps feet with odd high-stepping gait.

**Nest/Nesting Behavior:** Nest site is on open ground some distances from the water, often with large rock or clump of grass nearby, but no direct shelter or shade. May nest very close to tern breeding colonies. Nest is a shallow scrape in the sand, sometimes lined with shells and pebbles. May make several scrapes before actual nesting. Piping plovers lay 4 eggs that take about 25-30 days to hatch. Soon after hatching the chicks leave the nest and are able to feed themselves (worms, flies, and other invertebrates along the shoreline). Chicks are very mobile within about 3-5 days. In approximately another 20-25 days, they are able to fly and may feed at the site for another week or two. (Information from Renae Held, UNL Tern & Plover Conservation Partnership Program Coordinator and Troy Peterson Field Guides).

**Similar Species:** Killdeer, Semipalmated plover



Killdeer is 9 - 11"



Semipalmated plover

### Interior Least Tern (*Sterna antillarum*)

Order: *Charadriiformes*

Family: *Laridae*

Status: State and Federally Endangered



Foraging Least Tern



Least Tern with nestling



Least Tern on Nest

The Interior Least Tern was listed in the Federal Register as Endangered on May 28, 1985 (Information from U.S. Fish and Wildlife Service)

**Description:** L 9" (23 cm) W 20" (51 cm). Sexes similar. Breeding adults show distinctive white forehead against black cap and nape; gray above and white below; orange-yellow bill with dark tip; orange-yellow legs. Conspicuous black wedge on outer primaries is visible in flight. Short deeply forked tail. Non-breeding birds lack black cap, instead having a dark eye stripe. Juvenile birds are mottled gray-brown above and white below. **The Interior Least Tern is the smallest of all the terns.**

**Habitat:** Migrants can be found on lakes, rivers, and reservoirs. Nesting is done mainly on river sand bars or islands, but sometimes also on barren shorelines, gravel beaches, or newly cleared land.

**Status/Range:** Uncommon spring and fall migrant in eastern part of the state. Highly local summer resident in Platte and Niobrara River valleys. Local breeder. Call: Sharp "kit, kit", and repetitive "dee-dee". (Information from Nebraska Game and Parks Commission website)

**Courtship Behaviors:** In courtship, male (carrying fish in bill) flies upward, followed by female, then both glide down. On the ground, displays include courtship feeding by male.

**Nest/Nesting Behavior:** Nest site is on open ground. Nest is shallow scrape, sometimes lined with pebbles, grass, and debris. Least terns lay 3 eggs that hatch in about 22-28 days. The chicks are fed small, whole fish by the adults even after they learn to fly. In the first few weeks the chicks move very little and tend to stay near the nest. Their defense at this age is to lie down and hide, making them vulnerable to machinery and human traffic or disturbance.

(Information from Renae Held, UNL Tern & Plover Conservation Partnership Program Coordinator and Troy Peterson Field Guides)

**Similar Species:** Common Tern or Forster's Tern



Forster's Tern is 14-15"



Common Tern is 13-16"

## **Interior Least Tern and Piping Plover Survey Protocol**

*Terns and plovers can be disturbed by sight (human figures, visible equipment) and sound (loud equipment, banging, etc.) that are abnormal in their environment (typical roadway traffic is considered "normal"), chicks can be harassed or crushed by construction equipment; therefore surveyors need to ensure disturbance is minimized.*

### **Dates of Survey:**

- April 15 – August 15
- If no nesting activity is observed within the June 1 – July 15 time period, then no further surveys are needed.

### **Frequency and Timing of Survey:**

- Survey in the morning, prior to the start of project/construction activities for the day and record a start and stop time.
- Surveys must be conducted when there is adequate light to detect and identify birds. If cloudy or foggy – take additional time to ensure a good quality survey.
- Survey at least 3 times a week during nesting: Monday, Wednesday, Friday.

### **Method of Survey:**

- From a good vantage point, survey areas within 0.25 miles of where project/construction activities will occur.
- Use binoculars or spotting scope to survey for a minimum of 20 minutes.
- Look specifically for bird movements along sandbars in the middle of the channel and/or along the shoreline

### **Indicators of Nesting Activity:**

- Nesting behavior: copulations, birds returning to the same place, sitting on the sand for a long period of time, or nest exchange (males and females will generally take 20 minute shifts to incubate)
- Foraging behavior: looking for food along sandbar, probing the sand, hovering over river channel and diving into water for fish, and bringing back fish to sandbar.

If nesting activity is not observed, project/construction activities may commence. If a possible sighting occurs, then further investigation may be needed from a different vantage point or using higher-powered optics to verify if a nest or chicks are present. Landowner permission must be obtained if entering private land.

If at any time, a nest and nesting behavior is observed within 0.25 miles of the project:

- Do not start or continue to work
- Contact NDOT Environmental Section, Jon Soper at 402-479-3546 or Zach Cunningham at 402-479-4464.
  - NDOT Environmental will contact USFWS and NGPC for further instructions.
- Do not resume work within 0.25 mile of location until NDOT Environmental Section relays the "all clear" message to the Project Manager.

**River Otter Survey Protocol  
Nebraska Game and Parks Commission**

***Background***

River otters were historically found in all major waterways of Nebraska. Unregulated trapping was the likely factor leading to the complete disappearance of otters from Nebraska in the early 1900's. From 1986 to 1991, river otters were reintroduced at seven locations: South Loup River, Calamus River, North Platte River, Platte River, Cedar River, Elkhorn River and Niobrara River (Andelt 1992). Their populations have become established and have expanded from these locations.

River otters are very adaptable. They typically live along wooded rivers and streams with sloughs and backwater areas and ponds. Ideal habitat has year-round open water with a plentiful food supply. Otters have been referred to as a "flagship species" for wetlands and aquatic habitats and are an indicator of wetlands with ample and high quality water (Foster-Turley 1996 and Polechla 2000) and often select sites with the least amount of human disturbance (Wilson 1959, Tabor and Wight 1977, Polechla 1990, Testa et al. 1994). Suitable habitat must also have a sufficient food source available. River otters are generalists. The primary component of their diet is fish but crustaceans are a major component of their diet in Nebraska. Fallen trees, logjams, rock piles, and other structures in the water make good habitat for the otter's prey species and thus good habitat for the otter. Beaver dams create deep pools and slow currents that otters frequently utilize for hunting.

River otters are a highly mobile species and require large amount of space to meet their annual requirements. They are active throughout the year and may occupy 50 or more miles of stream course annually (Andelt 1992) and will often move from one area to another. A single day movement was documented of 42 km (Melquist and Hornocker 1983) but daily movements are more likely less than 10km/day (Melquest et al. 2003). The social structure of river otters is not well defined and appears to vary across its geographic range (Gorman et al. 2006a), so local densities are highly variable as otters may be solitary or in small groups.

While on land, otters will utilize "slides" on steep muddy or snowy banks where they slide down into the water on their bellies. When traveling any distance on a slippery surface otters are known to take a running start and then slide up to six meters (twenty feet).

River otters use dens that were dug by other species such as beaver and will also utilize upland dens such as rock, brush and log piles, hollow logs, or tree root structures. They will use a variety of temporary dens and resting sites and appear to prefer sheltered sites that provide protection and seclusion (Melquist et al. 2003). A female with young pups will typically only use one natal den until the pups are sufficiently mobile and self-sufficient which may take 10 weeks. Gorman et al. 2006b found that natal dens were located in areas protected from rapid changes in water levels. Many of the dens in this study were not in the bank, but rather a distance overland and were most often located below the ground. In Nebraska, female otters enter the natal den beginning in late February through April.

November 2016

### *Purpose*

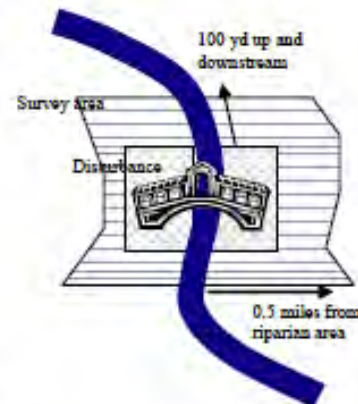
River otter surveys are designed to ensure awareness and resolution to any potential conflicts between the river otters and potentially disruptive human activities. This is a highly mobile species, and if present, is likely to leave during disturbance. However, otters are especially susceptible to disturbance when they have young pups in the natal den. Den surveys, which include presence/absence surveys, are recommended and, upon consultation with the Nebraska Game and Parks Commission, may be modified from this protocol depending on the situation. These should be considered when a disturbance will be within 0.5 miles of a river, pond, sandpit, or wetland area where river otters are known to exist or are likely to be present.

### *Den Surveys*

River otter dens are notoriously difficult to find and identify, as they will use dens excavated by other animals as well as brush piles, log piles and uprooted tree structures. For this reason, a den survey should begin by establishing presence/absence for the designated area. If river otters are present, a more thorough search for dens is necessary. Otters are highly mobile, and therefore, presence/absence and den surveys should be done within 10 days of the initiation of the construction activities or disturbance. It may be desirable to conduct two sets of surveys, one month or a season in advance and one within 10 days of the project beginning.

Generally the survey area must include:

1. The entire area of disturbance which includes construction areas, equipment staging areas, temporary roads, etc.
  2. An additional 100 yards up and down stream from the edge of the area of disturbance
  3. At least 0.5 miles from the edge of the riparian/wetland area upland across the entire area of disturbance.
- Additional survey area may be necessary depending on the landscape context of the site. Tributaries, wetland complexes, sloughs or ponds may increase the necessary survey area.



Presence/absence can be established by identifying sign (scat, tracks, runs, rolls etc.), by finding slides or latrine sites. Otter scat will vary in size, but can generally be distinguished by fish scales. They often disintegrate into a pile of fish scales and reek of fish (Elbroch 2003). In Nebraska, scat is likely to have crayfish shells and may have bones of mammals, birds, or amphibians. Ideal latrine sites for otters in Nebraska tend to be higher areas near the edge of the water and may include sandbars, bank protrusions, rocks or logs which stick out into waterways or sites where tributaries meet a main stream or body of water. They can often be found right near the water's edge but can also be located higher up on a bank, especially if water levels change throughout the year. Often a latrine will be located near a potential den site. Since otters repeatedly use the same latrine sites, scats will usually be abundant in one site, making them easier to find. Otter tracks are 5 to 7.5 cm (2 to 3 inches) across (Elbroch 2003)

November 2016

Otter slide marks can be an easy way to identify the presence or absence of river otters. They will slip down the steep banks of a body of water and also when they travel overland across snow, ice, or mud. Bridge surveys or aerial surveys after a fresh snow are especially good times to find evidence of otter activity because the snow provides a slippery surface for an otter to slide and slides imprints can be seen in fresh snow. Otters can take a few running steps and then slide up to six meters (20 feet) on the right surfaces and slopes. Winter otter slides can be an easy way to find if otters are in the area, however, presence or absence in the winter will not preclude additional surveys immediately prior to construction (within 10 days) for these highly mobile animals. In some cases, if otters are present there may be preventative measures that can be used to prevent them from using the area prior to construction.

If otters are established in the area, a thorough survey for potential den sites should be conducted. Any potential dens should be monitored to determine which species inhabits the den. Since they are highly mobile, potential dens should be re-checked 24 hours prior to initiating groundbreaking construction. If a river otter den is found in the area of the den survey, disturbance activities should not proceed or should cease and the Nebraska Game and Parks Commission should be contacted immediately.

Sam Wilson, Furbearer and Carnivore Program Manager, 402-471-5174  
Michelle Koch, Fish and Wildlife Specialist, 402-471-5438

## References

- Andelt, R. 1992. Nebraska's Threatened and Endangered Species: River Otter. Nebraskaland, Nebraska Game and Parks Commission, Lincoln, Nebraska.
- Elbroch, M. 2003. Mammal Tracks and Sign: A guide to North American species. Stackpole Books, Mechanicsburg, PA.
- Foster-Turley, P. 1996. Making biodiversity conservation happen: The role of environment education and communication. Environmental Education and Communication Project, U. S. Agency for International Development, Washington, DC.
- Gorman, T. A., J. D. Erb, B. R. McMillan and D. J. Martin. 2006a. Space use and sociality of river otters (*Lontra Canadensis*) in Minnesota. *Journal of Mammalogy* 87 (4): 740-747.
- Gorman, T. A., J. E. Erb, B. R. McMillan, D. J. Martin and J. A. Homyack. 2006b. Site characteristics of river otter (*Lontra canadensis*) natal dens in Minnesota. *American Midland Naturalist* 156:109-117.
- Melquist, W. E. and M. G. Homocker. 1983. Ecology of river otters in west central Idaho. *Wildlife Monographs* 83:1-60.
- Melquist, W. E., P. J. Polechla, D. Towell. 2003. River otter. Pages 708-734. In G. A. Feldhamer, B. C. Thompson and J. A. Chapman Eds., *Wild Mammals of North America*. John Hopkins University Press, London.

November 2016

- Polechla, P. J. Jr. 1987. Status of the river otter (*Lutra canadensis*) population in Arkansas with special reference to reproductive biology. Ph.D. Dissertation, University of Arkansas, Fayetteville, Arkansas.
- Poechla, P. 1990. Action plan for North American otters. Pages 74-79 in P. Foster-Turley, S. MKacdonald and C. Mason, Eds. Otters: An action plan for their conservation . Kelvyn Press, Broadview, IL.
- Tabor, J. E. 1977. Population status of river otter in western Oregon. *Journal of Wildlife Management* 41:692-699.
- Testa, J. W., D. F. Holleman, R. T. Bowyer, and J. B. Faro. 1994. Estimating populations of marine river otters in Prince William Sound, Alaska, using radio-tracer implants. *Journal of Mammalogy* 75:1021-1032.
- Wilson, K. A. 1959. The role of mink and otter as muskrat predators in northeastern North Carolina. *Journal of Wildlife Management* 18: 199-207.

November 2016

## Whooping Crane Fact Sheet



Whooping Cranes in Flight



Foraging Whooping Cranes



Adult with juvenile

The Whooping Crane (*Grus americana*) is a federal and state listed endangered migratory species. The Whooping Crane was federally listed as endangered in 1967. Major river systems used by whooping cranes in Nebraska include the Platte, Loup, Republican, and Niobrara rivers. Additionally, a 3-mile-wide, 56-mile-long reach of the Platte River between Lexington and Denman, Nebraska, has been federally designated as critical habitat for whooping cranes. (Information from U.S. Fish and Wildlife Service)

### Whooping Crane (*Grus americana*)

Order: *Gruiformes*

Family: *Gruidae*

**Status:** State and Federally Endangered. **Description:** L 52"(132 cm) W 87"(221 cm). Sexes similar but males are larger. White body with red and black facial markings. Yellow bill and long dark legs. Immature is white with tawny head and neck, and reddish-brown mottling on rest of body. **Habitat:** In Nebraska is found along the Platte Valley, with its wide slow moving river and associated sandbars and islands. Nearby wet meadows, croplands, and marshlands are important for foraging. **Status/Range:** Occasional spring and fall migrant along Platte Valley. 90% of sightings within 30 miles of Platte River, and 80% occurred between Lexington and Grand Island. **Call:** Shrill "ker-loo-ker-lee-loo" trumpet. **Comments:** Endangered. Management and protection programs slowly succeeding.

**Similar:** Sandhill Crane, Snow Geese, and especially American White Pelicans in flight: (Information from Nebraska Game and Parks Commission website)



American White Pelican

The Whooping Crane is one of the rarest birds in North America and also one of the largest. Whooping cranes are vulnerable to accidents during migration. Each spring they travel north from their wintering grounds around Aransas National Wildlife Refuge in Texas to their breeding grounds in Wood Buffalo National Park in central Canada (2,400 miles). Each fall this route is reversed. Their journey traverses eastern Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas. In Nebraska, they stop to rest and feed on the Platte, North and Middle Loup and Niobrara Rivers. (Information taken from the International Recovery Plan, Whooping Crane *Grus americana*; Third revision, 2007).

## Whooping Crane Survey Protocol

*Whooping Cranes can be disturbed by sight (human figures, equipment within sight) and sound (loud equipment, banging, etc.) that are abnormal (roadway traffic is normal), therefore surveys are needed to ensure disturbance is minimized.*

### Dates of Survey:

- Spring Migration – March 6 – April 29
  - Fall Migration – October 9 – November 15
- NDOT will receive migration updates from USFWS. Surveys are to be conducted 3 times a week until whooping cranes are reported in South Dakota (Fall) or Kansas (Spring), then they will be required daily. If all Whooping Cranes have moved out of the area, NDOT and USFWS will consult and no further surveys may be necessary.

### Bridge Projects (Roosting Survey)

#### Time of Survey:

- Prior to sunrise (published clock time) to make use of the beginning daylight hours, record start and stop time
- *Optional* evening survey (after 4:00 pm) to check for birds potentially coming into roost
- Do east side of bridge first to reduce glare from sun.

#### Method of Survey:

- Stand at the four corners of the bridge – look at all up and down stream channels as far as you can see
- Use binoculars or spotting scope
- Watch for at least 15 minutes overall
  - Look for bird movements – possibly moving within channel among vegetation
  - Look for Whooping Cranes among Sandhill Crane groups
- If cloudy, overcast or foggy and visibility is reduced to below 0.5 miles, allow time for clearing– take additional time to ensure the best survey possible

### Linear Projects (Foraging Survey)-not crossing a major river

#### Time of Survey:

- Survey project within one hour of start of workday, with at least one survey done no later than 10 am. Record start and stop time.
- Survey by driving the area of project to be worked on that day and searching fields for birds within 0.5 miles of project.

*\*\*For projects which are a combination of bridge and linear work use both methods.\*\**

**If Whooping Cranes are not seen during the morning survey, work may begin after completion of the survey.**

### **If Whooping Cranes are spotted within 0.5 miles of the active construction:**

- Do not start work.
- Stop work if seen at times other than the morning survey.
- Contact NDOT Environmental Section: Jon Soper 402-479-3546 or Zach Cunningham, 402-479-4464
- Jon Soper or Zach Cunningham will contact USFWS and NGPC for further instructions.
- Do not resume work at the bridge or within 0.5 mile of the abutments until NDOT Environmental Section relays the "all clear" message to the Project Manager.
- Work can begin or resume if birds move off; record sighting, bird departure time, and work start time on survey form.

Updated 12/9/2014

## Bald Eagle Fact Sheet

Bald Eagles (*Haliaeetus leucocephalus*) are very large, brown raptors that utilize the mature, forested areas along the major river systems in Nebraska. Nests are typically built near rivers, lakes and reservoirs and are most often in large cottonwood trees. Nests are constructed with large sticks and can become 8 feet across and 12 feet deep. A breeding pair will often return to the same nest and add new material each year.



Adult Bald Eagle



Bald Eagle in Flight



Bald Eagle Nest

The bald eagle gained protection under the Bald and Golden Eagle Protection Act in the Federal Register on June 8, 1940. This Act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

### Golden Eagle (*Haliaeetus leucocephalus*)

**Order:** *Accipitriformes*

**Family:** *Accipitridae*

**Status:** Protected by the Bald and Golden Eagle Protection Act

**Description:** L 35" W 80". Sexes similar, but females are about 25% larger than males. Adults readily identified by white head and tail, large yellow bill. Feet are also yellow. Juveniles are mostly dark, with blotchy white patches. Require four or five years to reach full adult plumage.

**Habitat:** Wooded river corridors and larger lakes/sandpits with the presence of large cottonwoods for nesting/roosting. Solitary trees have been used for nesting, but are associated with prime fishing locations. Eagles may establish winter roosts miles from foraging areas. In Nebraska, some communal roost sites can have as many as 100 eagles.

**Status/Range:** Bald eagles can be found statewide in Nebraska, and are present throughout the year as they both breed and winter here. Wintering eagle numbers fluctuate, as there are often few locations that provide adequate resources for eagles during winter.

**Call:** Weak staccato of chirping whistles, "kleek kik ik ik ik".

**Similar Species:** Immature bald eagles can be mistaken for golden eagles or turkey vultures.

Updated 12/9/2014

## Bald Eagle Survey Protocol Nebraska Game and Parks Commission

### *Background*

Bald eagles (*Haliaeetus leucocephalus*) utilize the mature, forested areas along the major river systems in Nebraska. Eagles are present throughout the year in Nebraska as they both breed and winter in Nebraska. Nest building activity may begin as early as December. Nests are typically built near rivers, lakes and reservoirs and in Nebraska are most often in large cottonwood trees, although bald eagles use other types of trees nationwide. The nests are constructed with large sticks and lined with leaves and grasses. A breeding pair will often return to the same nest and add new material each year. Nests can become 8 feet across and 12 feet deep. Nesting activities begin with egg laying which occurs as early as February. Fledging takes place when the young are approximately 10 – 11 weeks old, however the young remain near the nest and are dependent on the adults for food for at least another 6 weeks. In Nebraska, the nesting season continues through August.

The bald eagle southward migration begins as early as October and the wintering period extends from December through March. Breeding pairs may stay at their nest site year round if food is available. Eagles are often most numerous from late February through early March, when wintering numbers are supplemented by migrants that wintered further south. All migrants that breed elsewhere typically leave by late March. Wintering eagle numbers fluctuate from year to year, but birds typically concentrate in areas with large open water where food is available and form winter roosts. In Nebraska, there are often few locations that provide adequate resources for eagles during the winter. Protection of these areas is important, as relocation during the winter may impact survival. Roosts may be in deciduous or coniferous trees, but in Nebraska, most are in cottonwood trees. Eagles may establish winter roosts miles from the foraging areas (Keister et al. 1985). Winter roosting may assist with finding resources (Knight and Knight 1983) and pair bond formation. In Nebraska, some communal roost sites can have as many as 100 eagles (Nebraska Game and Parks Commission 1993).

### *Purpose*

Eagle surveys are designed to ensure awareness and resolution to any potential conflicts between bald eagle and potentially disruptive human activities. To document the presence or absence of bald eagles and their activities, two types of surveys are recommended: nest surveys and winter roost surveys. These should be considered when a disturbance will occur within 0.5 miles of areas of suitable habitat for bald eagles.

### *Nest Surveys*

Bald eagle nests are usually conspicuous and distinctive, but it must be stressed that nests can be well concealed and very difficult to see, particularly when trees have foliage. Nest surveys should complete a full inspection of potential trees for bald eagle nests within 0.5 miles of the project in areas considered suitable habitat. Transects should be recorded using GPS. In addition to nests, any bald eagles observed during the survey and their behavior should be noted. Potential nests should be observed from a distant location that does not disturb the eagles to confirm the presence or absence of eagles. Nest surveys are to be conducted by a qualified

January 19, 2007

Updated 12/9/2014

biologist. Results of surveys and transect locations should be sent to the Nebraska Game and Parks Commission and US Fish and Wildlife Service.

If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If bald eagles are nesting in the area, consultation with NGPC and USFWS will be required, so it is in the project proponent's best interest to complete the survey and notify the agencies as early as possible.

(See timing diagram page 3)

#### *Winter Roost Surveys:*

For the purposes of avoiding adverse impacts to wintering bald eagles, two types of roosts are defined. *Transitory roosts* are defined as 3 or more eagles, within 100 meters of each other, for at least 2 nights in an area with no previous knowledge of winter communal roosting. *Communal roosts* are defined as 6 or more eagles in a small area for extended periods of time or used for multiple years. Communal roosts in Nebraska are monitored, so typically their existence will be known and conservation measures established prior to construction.

If construction will be occurring in an area near suitable habitat (near open water with large trees present) where there is no prior knowledge of a communal roost site and construction will be occurring between October 1 and January 31 winter roost surveys are necessary. Winter roost surveys should begin at least 1 day prior to the first date of construction. Winter roost surveys should be conducted daily at dawn as the eagles are likely to leave the roost to forage within the first hour of daylight (depending on weather conditions). These surveys need only be conducted in the area of active construction, not the entire project area. Surveys may be completed by a trained individual using appropriate binoculars or spotting scope. Survey reports should be submitted weekly to the Nebraska Game and Parks Commission and US Fish and Wildlife Service. Evidence of a roost should be reported immediately.

Please note, eagles seen soaring over a construction site should be watched to observe potential nesting or roosting, but construction does not need to terminate due to soaring behavior.

(See timing diagram page 3)

#### References

Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Keister, G. P., Jr., R. G. Anthony and H. R. Holbo. A model of energy consumption in bald eagles: An evaluation of night communal roosting. The Wilson Bulletin. 97(2): 148-160

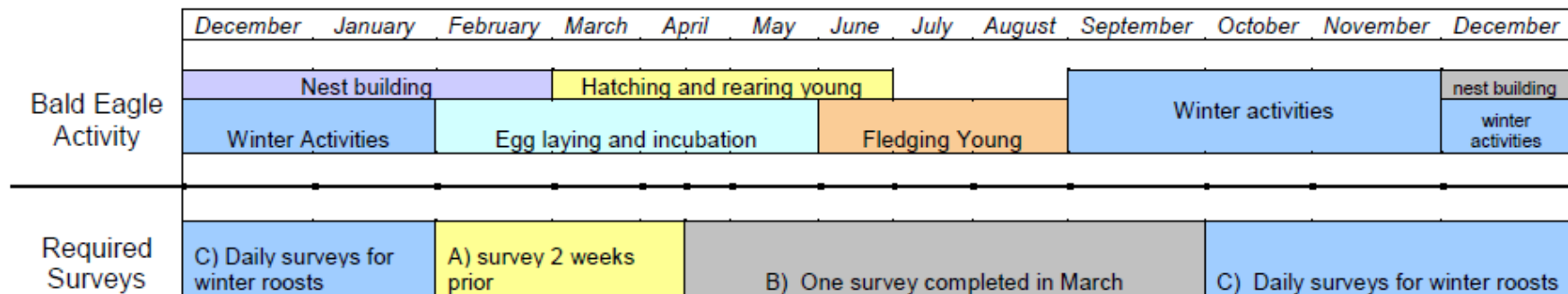
Knight, S. K. and R. L. Night. 1983. Aspects of food finding by wintering bald eagles. The Auk 100: 477-484.

Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

January 19, 2007

Updated 12/9/2014

Bald Eagle Survey Recommendations  
Timing Diagram  
Standard Protocol prepared by NE Game and Parks Commission  
January-07



- A) Projects starting between February 1 to April 15 must have a nest survey completed 1-14 days prior to the start of construction
- B) Projects starting between April 15 to October 1 need a nest survey completed as early as March, or before project begins
- C) Projects starting between October 1 and December need daily winter roost surveys completed

NOTE: Surveys are only necessary in areas where the disturbance is near suitable eagle habitat

Timing of eagle activity references:

Draft National Bald Eagle Management Guidelines, US Fish and Wildlife Service, 2006,  
Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.  
Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

January 19, 2007

## **NOTICE TO BIDDERS (Environmental Commitments)**

### **GENERAL CONDITIONS**

1. The Contractor shall follow all Nationwide Permit General Conditions and Nebraska Regional Conditions, as applicable
2. The Contractor shall not drive through, stage, store, waste or stockpile materials and equipment within delineated wetland boundaries (Wetlands – Do Not Disturb) and/or environmentally sensitive areas (Sensitive Area – Do Not Disturb) as shown in the project plan aerial sheets and/or the erosion control plan sheets included in the plan set.

### **CHANGES IN PROJECT SCOPE**

1. The Contractor shall notify the Engineer of any changes to the Project Scope that may occur due to Extra Work, Additional Work or Change of Conditions.
2. The Department will notify the Environmental Section of any potential changes to the Project Scope from the Contractor for review. The Environmental Section will provide an evaluation and comments and/or written approval of any changes to the Project Scope.

### **CONSTRUCTION STARTS**

1. The Contractor shall make requests for early starts according to Section 108.
2. The Department will coordinate with the Environmental Section for approval.

### **ENDANGERED AND THREATENED SPECIES**

1. The Contractor shall notify the Engineer if any federal or state listed species are observed during construction.
2. The Department will coordinate with the Environmental Section.

### **REFUELING**

1. The Contractor shall only store fuel and refuel outside of sensitive areas as shown in the contract or marked in the field.

### **RESTRICTED ACTIVITIES**

1. The Contractor shall only perform restricted activities within project limits. Any activities required to be performed outside the project limits shall be permitted and performed in accordance with all Federal, state and local laws.
  - a. Borrow sites
  - b. Burn sites
  - c. Construction debris waste disposal areas
  - d. Concrete and asphalt plants
  - e. Haul roads
  - f. Stockpiling areas

- g. Staging areas
- h. Material storage sites

#### **WASTE/DEBRIS**

1. The Contractor shall dispose of any construction waste or debris in compliance with all Federal, State and Local laws and in a manner that will not adversely affect endangered species or critical habitat.

#### **INTERIOR LEAST TERN & PIPING PLOVER**

1. If species are present, the Engineer will notify the Contractor to stop work until a determination can be made to resume work.
2. Nighttime work from April 15 to August 15 is not authorized.

#### **NORTHERN LONG-EARED BAT**

1. The Contractor shall not perform tree clearing, bridge deck joint replacements or bridge removal between June 1 to July 31<sup>st</sup>. If this work is necessary, notify the Engineer to perform a survey prior to the start. A determination will be made.

#### **RIVER OTTER**

1. If species are found, the Contractor shall not perform work within 0.5 mile of the active den.

#### **WHOOPING CRANE**

1. The Contractor shall not perform work during the Whooping Crane migration periods between March 6 to April 29 and October 9 to November 15. If this work is necessary, notify the Engineer to perform a survey prior to the start. A determination will be made.
2. If species are found, the Contractor shall not perform work within 0.5 mile of the Whooping Crane.
3. Nighttime work from March 6 to April 29 and October 9 to November 15 is not authorized.

#### **BALD AND GOLDEN EAGLE PROTECTION ACT**

1. The Contractor shall notify the Engineer to perform a survey if construction will begin between February 1 and October 1 at least 1 day but not more than 14 days prior to the start. A determination will be made.

#### **LWCF Act – Martin Bay Recreation Area**

The Contractor shall maintain access to the LWCF encumbered property for public use during project construction.

## UNEXPECTED WASTES

1. The Contractor shall stop all work and secure the immediate area upon the discovery of any unexpected waste. The Department will coordinate appropriate actions.

## STORM WATER POLLUTION PREVENTION PLAN

The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site. This project does not require a Construction Stormwater Permit or a Storm Water Pollution Prevention Plan (SWPPP).

## STORM WATER DISCHARGES (1-43-1217)

In compliance with the Federal Water Pollution Control Act, authorization to discharge storm water on this project has been granted under National Pollutant Discharge Elimination System (NPDES) General NPDES Permit Number NER110000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska. This permit became effective on January 1, 2008.

Contractors are advised that, under the Construction Storm Water General Permit, ***plant sites, camp sites, storage sites, and borrow or waste sites not shown on the plans may be subject to separate NPDES permit authorization requirements for stormwater discharges from those locations.*** Contractors shall be responsible for verifying the need for NPDES permit coverage with the Nebraska Department of Environmental Quality (NDEQ). When required for these locations, the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

Additionally, asphalt (SIC Code 2951) or concrete (SIC Code 3273) batch plants that are owned by a private Contractor and are operated on a contract-for-service basis to perform work for the Contractor completing the project may be subject to NPDES General Permit Number NER000000 for Industrial Storm Water Discharges. While the plant may be required for completion of the project, it is not under the control of the Department (or other project owner); and the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

The NDEQ may be contacted at 402-471-4220 for additional information.

## REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST (1-43-1217)

All bidders must provide to the NDOT the identity of all firms who provided quotations on all projects, including both DBEs and non-DBEs. This information must be on a form provided by the NDOT Contracts Office.

If no quotations were received, the bidder must indicate this in the space provided.

Each bidder will be required to submit one list per letting to cover all projects bid.

**WORKER VISIBILITY  
(1-43-0719)**

Pursuant to Part 634, Title 23, Code of Federal Regulations, the following modified rule is being implemented:

Effective on January 1, 2008, all workers within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

High-visibility safety apparel is defined to mean personal protective safety clothing that:

- 1 - is intended to provide conspicuity during both daytime and nighttime usage, and
- 2 - meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107 publication titled "American National Standards for High-Visibility Safety Apparel and Headwear."

**SPECIAL PROSECUTION AND PROGRESS  
(Federal Immigration Verification System)  
(1-43-1217)**

The Contractor shall register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska. The Prime Contractor shall contractually require every subcontractor to register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska.

The Federal Immigration Verification System shall be an electronic verification of the work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program. The Contractor may use an equivalent Federal program designated by the United States Department of Homeland Security or other Federal agency authorized to verify the work eligibility status of a newly hired employee. The equivalent program shall comply with the Immigration Reform and Control Act of 1986.

The Prime Contractor shall furnish a letter to the NDOT Construction Division in Lincoln on company letterhead and signed by an officer of the company stating that documentation is on file certifying that the Contractor and all subcontractors have registered with and used a Federal Immigration Verification System. The Contractor shall maintain all records of registration and use for a period of three years and make records available upon request. The Contractor shall contractually require subcontractors to maintain all records for a period of three years and make records available upon request.

Payment will not be made to the Contractor for using the Federal Immigration Verification System or the maintenance of the records. This work shall be subsidiary to the work being performed.

The Contractor's Certification shall become part of the final records of the Contract. The Department considers this document to have direct bearing to the beginning interest date and may affect the amount of interest earned.

**PROPOSAL GUARANTY BID BOND (BID BOND)  
(1-43-1217)**

Paragraph 1.b. of Subsection 102.14 in the Standard Specifications is void.

**PERMITS, LICENSES, AND TAXES  
(Contractor Site Use Approval)  
(1-43-1118)**

Paragraph 4. of Subsection 107.02 Paragraph 4. in the Standard Specifications is void and superseded by the following:

4. Contractor Site Use Approval:
  - a. (1) When a Contractor intends to obtain borrow and/or dispose of excess excavation at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 119 "*Borrow Site - Waste Excavation Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.
  - (2) When a Contractor intends to: (i) dispose of construction debris, (ii) stockpile materials, equipment or other tangible property for the project, and/or (iii) install and operate a mobile asphaltic concrete plant, mobile Portland cement concrete plant or other mobile production plant at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 56 "*Plant Site - Stockpile Site - Construction Debris Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.
  - (3) The NDOT Form 56 and NDOT Form 119 (hereafter referred to as "the Contractor Site Request form(s)") can be found on the NDOT website. Each Contractor Site Request form shall represent only one site and shall be project specific.
  - (4) The time frame required to obtain site approvals varies and is dependent upon whether the project has a Corps Section 404 notifying-permit and upon the complexities of each site listed in each request.

- b. The Contractor shall contact the Nebraska Department of Environmental Quality (NDEQ) to determine if it is necessary for the Contractor to obtain a NPDES permit. The Contractor shall also be responsible for obtaining any and all other permits required by local governments.
- c. The Contractor shall not begin work at any borrow, waste, debris, stockpile or plant site until receiving written approval for the submitted Contractor Site Request form(s) from NDOT, before obtaining a NPDES permit (if required), or any other permits required.
- d. No extension of completion time will be granted due to any delays in securing approval of a borrow, waste, debris, stockpile or plant site unless a review of the time frames concludes that there were conditions beyond the Contractor's control.

**MEASUREMENT AND PAYMENT  
(Partial Payment)  
(1-43-0318A)**

Paragraph 6 of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

- 6. When payrolls must be submitted, the Department may withhold partial payments if the Contractor does not provide all payrolls (including Subcontractor payrolls) within seven (7) days of each payroll ending date.

**WAGES AND CONDITIONS OF EMPLOYMENT  
(Employment of Labor – Payrolls)  
(1-43-0119)**

Paragraph 3 of Subsection 110.03 of the Standard Specifications shall be amended to include the following:

- i. On projects requiring submittals of certified payrolls, Contractors shall submit their payrolls electronically, meeting the following requirements:
  - (1) Format – Portable Document Format (PDF)
  - (2) Size of file – Limited to 25 MB
  - (3) Signatures – A scanned copy of the original certified payroll or Adobe digitally signed.

Payrolls certified by the Prime Contractor must be emailed to the Project Manager within seven (7) days of the payment date thereof. Payrolls must be complete and accurate.

**LIABILITY INSURANCE  
(1-48-0118)**

Paragraphs 1.a.(5) and (6) of Subsection 107.15 in the Standard Specifications are void and superseded by the following:

- (5) The Owner and the State of Nebraska, Department of Transportation, shall be named as Additional Insureds on a primary and non-contributory basis including completed operations for three (3) years after final acceptance and payment.
- (6) Contractor agrees to waive its rights of recovery against the Owner and the State of Nebraska, Department of Transportation. Waiver of Subrogation in favor of the Owner and the State of Nebraska, Department of Transportation shall be added to the policy.

Paragraphs 1.b.(4) and (5) of Subsection 107.15 are void and superseded by the following:

- (4) Contractor agrees to waive its rights of recovery against the Owner and the State of Nebraska, Department of Transportation. Waiver of Subrogation in favor of the Owner and the State of Nebraska, Department of Transportation, shall be added to the policy.
- (5) Automobile liability coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraph 1.c. of Subsection 107.15 is amended to include the following:

Limit: Statutory coverage for Nebraska and for any other State in which the project is located.

Paragraphs 1.c.(2) and (3) of Subsection 107.15 are void and superseded by the following:

- (2) Contractor agrees to waive its rights of recovery against the Owner and the State of Nebraska, Department of Transportation. Waiver of Subrogation in favor of the Owner and the State of Nebraska, Department of Transportation shall be added to the policy.
- (3) Workers' compensation coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraphs 1.d.(3) and (4) of Subsection 107.15 are void and superseded by the following:

- (3) The Owner and the State of Nebraska, Department of Transportation shall be "Additional Insureds".
- (4) Contractor agrees to waive its rights of recovery against the Owner and the State of Nebraska, Department of Transportation. Waiver of subrogation in favor of the Owner and the State of Nebraska, Department of Transportation shall be provided.

Paragraph 1.f.(5) of Subsection 107.15 is void and superseded by the following:

- (5) Prior to execution of the contract, Contractor shall provide the Owner and the State of Nebraska, Department of Transportation evidence of such insurance coverage in effect in the form of an ACORD® (or equivalent) certificate of insurance executed by a licensed representative of the participating insurer(s). Certificates of insurance shall show the Owner and the Nebraska Department of Transportation as the certificate holders.

Paragraph 1.f. of Subsection 107.15 is amended to include the following:

- (9) For so long as insurance coverage is required under this agreement, the Contractor shall have a duty to notify the Owner and the State of Nebraska Department of Transportation (State) when the Contractor knows, or has reason to believe, that any insurance coverage required under this agreement will lapse, or may be cancelled or terminated. The Contractor must forward any pertinent notice of cancellation or termination to both the Owner and the State by mail (return receipt requested), hand-delivery, email, or facsimile transmission within 2 business days of receipt by Contractor of any such notice by an insurance carrier. Copies of notices received by the Contractor shall be sent to the Owner at its proper address, and to the State at the following address:

Nebraska Department of Transportation  
Construction Division -- Insurance Section  
1500 Highway 2, P.O. Box 94759  
Lincoln, NE 68509-4759  
Facsimile No. 402-479-4854  
[NDOT.ConstructionInsurance@nebraska.gov](mailto:NDOT.ConstructionInsurance@nebraska.gov)

### **NOTICE TO BIDDERS (1-48-1217)**

While the plans and specifications call for and make reference to the Department of Transportation and its various Divisions to make decisions and test materials for acceptance, this project has been delegated under 23 CFR 635.105 to the Local Public Agency Owner, who shall administer the project. Therefore, any reference to the Department of Transportation's responsibility to: interpretation of the plans and specifications, inspection of the work, testing and acceptance of materials, approval of the work, and final acceptance of the project, shall be delegated to the Local Public Agency Owner and their representative.

## **LOCAL PUBLIC AGENCY RESPONSIBLE CHARGE**

Upon execution of the contract, the Contractor is to direct all project related communication to the Responsible Charge (RC) designated by the project owner (Local Public Agency).

### Responsible Charge:

Gary Brinker  
1321 N. Jeffers Street  
North Platte, NE 69103  
P: 308-535-8031  
F: 308.535.8034

## **SPECIAL PROSECUTION AND PROGRESS (Project Liquidated Damages) (1-48-1217)**

For this project, the formula used to determine Project Liquidated Damages, as determined in Paragraph 2. of Subsection 108.08 in the Standard Specifications, is amended to read:

$$LD = \frac{R \times C}{T}$$

Where: LD = Liquidated damages per working day or calendar (rounded to the nearest dollar).

C = Original contract amount (includes all work completed and unfinished).

T = Original number of calendar days or working days, whichever is specified in the contract.

R = 0.12 for LPA projects.

## **SPECIAL PROSECUTION AND PROGRESS (Construction Signs & Barricades) (1-48-1217)**

With the exception of detour route signage and any non-standard signs not shown in the plans, the Contractor shall be responsible for furnishing, installing, maintaining and removing all construction signs and barricades, in accordance with the provisions of Section 422 in the Standard Specifications.

## **CONSTRUCTION DETAILS**

### **TEMPORARY WATER POLLUTION CONTROL (2-1-1217)**

Section 204 in the Standard Specifications is void.

### **CONSTRUCTION STORMWATER MANAGEMENT CONTROL (2-1-1217)**

#### **A. General**

1. This Section defines some best management practices (BMPs) for erosion and sediment control measures and construction practices the Contractor shall use to prevent soil erosion and avoid water pollution.
2.
  - a. The Department and the Contractor are co-permittees of the NPDES Construction Storm Water General Permit.
  - b. The Contractor shall comply with all conditions required by the current NPDES Construction Storm Water General Permit.
3. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent silting of the waters of the state, the project site, and adjacent property. Construction of drainage facilities, as well as performance of other contract work which will contribute to the control of siltation, shall be carried out in conjunction with earthwork operations or as soon thereafter as is practicable.
4.
  - a. The Contractor shall take sufficient precautions to prevent pollution of the waters of the state, the project site, and adjacent property from construction debris, petroleum products, chemicals, or other harmful materials.  
  
The Contractor shall conduct and schedule the operations to avoid interference with any protected species.
  - b. The Contractor shall comply with all applicable statutes relating to pollution of the waters of the state and fish and game regulations.
5. All construction debris shall be disposed in a manner that it cannot enter any waterway. Excavation shall be deposited as to protect the waters of the state from siltation.
6. All erosion and sediment control measures shall be properly installed and maintained by the Contractor until all permanent drainage facilities have been constructed, and all slopes are sufficiently vegetated to be an effective erosion deterrent; or until tentative acceptance of the work.

7. All erosion and sedimentation resulting from the Contractor's operations and the weather conditions must be corrected by the Contractor.

### **LIMITATION OF OPERATIONS (2-1-1217)**

#### **A. General**

1. The maximum exposed surface area for the Contractor's operations in excavation, borrow, and embankment is 18 acres (72,800 m<sup>2</sup>) plus an equal area of clearing and grubbing/large tree removal. A written request for an increase in the maximum exposed surface area may be approved by the Engineer. This approval will be based on the soil, moisture, seasonal conditions, the Contractor's operation, or other conditions.
2. The Engineer shall have the authority to reduce the maximum exposed surface area when any of the following conditions warrant:
  - a. Soil and moisture conditions are such that erosion is probable.
  - b. Seasonal conditions may force extended delays.
  - c. Proximity to the waters of the state requires more stringent controls.
  - d. Equipment and personnel available on the job is not sufficient to properly maintain erosion and dust control measures.
  - e. Any other environmental condition in the area that may exist which would be affected by erosion from the project.
3. Construction operations in rivers, streams, wetlands, and impoundments shall be restricted to those areas specifically shown in the contract. Rivers, streams, wetlands, and impoundments shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations.
4. Fording and operation of construction equipment within streams and wetlands will not be allowed, unless explicitly allowed in the contract. Streams are defined as any area between the high banks, regardless of the flow conditions.

## **CONSTRUCTION METHODS (2-1-1217)**

### **A. General**

1. The Contractor shall conduct all construction activities and install temporary erosion control measures, as necessary, to control sediment and avoid soil erosion during construction.
2. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time.
3. Construction stormwater management control measures for Contractor obtained work areas located outside the right-of-way, such as borrow site operations, haul roads, plant sites, staging sites, waste sites, equipment storage sites, etc. are the sole responsibility of the Contractor. All construction stormwater management control measures for these areas are at the Contractor's expense. The Contractor is responsible for securing all required permits for use of these sites.
4. The construction stormwater management procedures contained herein shall be coordinated with any permanent erosion control measures specified elsewhere in the contract to the extent practical to assure economical, effective, and continuous erosion and sediment control throughout the construction period.
5. The Contractor shall be responsible to limit erosion and prevent siltation into the waters of the state during the construction period, as well as during the times that work may be suspended.
6.
  - a. All erosion and sediment control items shall be installed by personnel who are knowledgeable in the principles and practice of various BMP installations.
  - b. The installation of all erosion and sediment control items shall be done under the direct supervision of the Contractor's employee who has successfully completed training provided by the Department and has been certified as an Erosion and Sediment Control Inspector (Inspector). The Contractor's Inspector shall be present at each site during installation to direct and inspect all erosion and sediment control BMP installations.
    - i. The NDOT Erosion and Sediment Control Inspector Certification is obtained by completing an Erosion and Sediment Control Inspector Training Course provided by the Nebraska Department of Transportation and passing the examination that accompanies the training.
  - c. The Contractor shall notify the Engineer of all employees, who have been certified as Inspectors, who will be on the project to direct and inspect all erosion and sediment control BMP installations.
  - d. No payment will be made for any erosion and sediment control item unless a Contractor's Inspector was present to directly supervise and inspect the work.

- e. No payment will be made for any erosion and sediment control item that is not properly installed. All erosion and sediment control items shall be installed as per the contract.

## **ENVIRONMENTAL COMMITMENT DOCUMENT (2-1-1217)**

### **A. Environmental Commitment Document**

- 1.
  - a. An Environmental Commitment Document will be created by the Department to identify all project specific environmental commitments and will be included in the Contract.
  - b. The Department will provide information for the following, when applicable:
    - i. Storm Water Pollution Prevention Plan (SWPPP)
    - ii. U.S. Army Corps of Engineers (USACE) Section 404 Permit
    - iii. Nebraska Department of Environmental Quality 401 Water Quality Certification
    - iv. State Title 117 Waters (USACE Non-Jurisdictional)
    - v. Floodplain Permit
    - vi. Historic Clearance
    - vii. Endangered Species Act Clearance
    - viii. Nebraska Nongame and Endangered Species Conservation Act Clearance
    - ix. National Environmental Policy Act Compliance
    - x. NPDES Construction Stormwater Permit (within Right-of-Way limits, only)
    - xi. Conservation Measures
    - xii. Migratory Bird Treaty Act
    - xiii. Bald and Golden Eagle Protection Act Compliance
    - xiv. Other pertinent issues

- c. The Contractor shall provide information for the following, when applicable:
  - i. Temporary Erosion Control Plan
  - ii. Spill Prevention and Control Plan
  - iii. Migratory Bird Treaty Act Compliance Plan
  - iv. Name and telephone number of the Contractor's representative responsible for the Environmental Commitments
  - v. Name and telephone number of the employees that are NDOT-Certified Erosion and Sediment Control Inspectors
  - vi. Critical Path Construction Schedule
  - vii. Other items as defined elsewhere in the contract

### **STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (2-1-1217)**

#### **A. General**

- 1. A SWPPP is required for projects that construction activities will cause a land disturbance of one (1) acre or more. The Department will prepare the SWPPP for the areas within the Right-of-Way, temporary easements and permanent easements.
- 2. For projects not requiring a SWPPP, the Contractor shall comply with the requirements of Environmental Commitment Document, Paragraph 1.b. of this Special Provision, as applicable.
- 3. Contractor obtained work areas, located on private property, are not included in the NDOT Project SWPPP.

#### **B. Temporary Erosion Control Plan**

- 1. The Contractor shall prepare and submit the Temporary Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Temporary Erosion Control Plan has been submitted to the Engineer and appropriate erosion control measures are in place. Payment for any work on the contract will be withheld if erosion control measures are not in place or properly maintained.
- 2. The Temporary Erosion Control Plan will be reviewed at project progress meetings. All active Contractors shall have their Inspectors present and work in cooperation to determine any necessary changes. Necessary changes will be documented on the Temporary Erosion Control Plan by the Engineer.

3. Payment for preparing the Temporary Erosion Control Plan, inspections and meeting reviews are subsidiary to items that direct payment is made.

**C. Spill Prevention and Control Plan**

1. All project activities shall be addressed in the Spill Prevention and Control Plan. The Contractor shall prepare and submit the plan to the Engineer and install all appropriate spill prevention and control measures prior to the start of any work.
2. The Spill Prevention and Control Plan shall clearly state measures to prevent, contain, document and clean up a spill. It shall state measures for disposal of the contaminated material, disposal documentation and incident review to train personnel to prevent spills from reoccurring.
3. Spill Prevention and Control Plans are applicable to construction sites where hazardous materials are stored, used and/or generated onsite. Hazardous materials include, but not limited to, hazardous wastes, pesticides, paints, cleaners, petroleum products, fertilizers, solvents and porta-potty wastes.
4. Direct payment will not be made for the Spill Prevention and Control Plan.

**D. Migratory Bird Treaty Act Compliance Plan**

1. The Contractor shall not begin work until a Migratory Bird Treaty Act Compliance Plan has been submitted to the Engineer and appropriate nesting migratory bird avoidance measures are in place.
2. a. The Contractor shall clearly state the necessary measures they intend to use to avoid a "Take" of nesting migratory birds in the Migratory Bird Treaty Act Compliance Plan. Measures may include but are not limited to:
  - i. Clearing and grubbing prior to April 1<sup>st</sup> or after September 1<sup>st</sup>
  - ii. Tree removal prior to April 1<sup>st</sup> or after September 1<sup>st</sup>
  - iii. Clearing empty nests on structures prior to April 1<sup>st</sup>
  - iv. Maintaining clear structures until commencement and throughout the duration of work on structures
  - v. Netting structures to prevent nesting
  - vi. Commitment to perform surveys according to protocol
  - vii. Hire a biologist to survey areas to be disturbed prior to commencement of work during the nesting season
  - viii. Submittal of required bird survey reports
  - ix. Training of Contractor Personnel to insure compliance

3. a. The Migratory Bird Treaty Act Compliance Plan is applicable to the entire project site to avoid the "Take" of migratory birds protected under the Migratory Bird Treaty Act.
- b. "Take" is defined as: pursuit, hunt, shoot, wound, kill, trap, capture, collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.
4. The Migratory Bird Treaty Act Compliance Plan shall adhere to the NDOT's Avian Protection Plan located at:

<http://www.dot.nebraska.gov/media/3952/avian-protection-plan.pdf>

Direct payment will not be made for the Migratory Bird Treaty Act Compliance Plan.

**E. SWPPP Inspection**

1. The Contractor shall accompany the Engineer on inspections in accordance with the NPDES Construction Storm Water General Permit.
2. The SWPPP will be maintained and updated by the Engineer as work progresses and site conditions change to accurately describe the BMPs that are currently in place.
3. The Contractor's participation in SWPPP inspections, maintenance and updates shall begin on the first day construction activities cause land disturbance and end on the date of project completion as evidenced as the completion date in the District Engineer's Letter of Tentative Acceptance.
4. a. The Contractor's Inspector shall be responsible for ensuring that all BMPs are installed in accordance with the contract or the manufacturers' recommendations. The Contractor's Inspector shall be capable of reading and interpreting these documents.
- b. The Contractor's Inspector shall be familiar with product and structural BMPs. The Contractor's Inspector shall inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality.
5. Payment for project inspection is subsidiary to items that direct payment is made.

## **ENVIRONMENTAL COMMITMENT ENFORCEMENT (2-1-1217)**

### **A. General**

1. This specification establishes payment and disincentive assessment for the Contractor's performance in complying with Contract Environmental Commitments.
2. Deficiencies are described but not limited to:
  - a. Failure to install pollution prevention control BMPs as work progresses or as described in the SWPPP.
  - b. Failure to maintain existing pollution prevention control BMPs.
  - c. Failure to remove non-functioning pollution prevention control BMPs.
  - d. Failure to comply with USACE Section 404 Permit requirements.
  - e. Failure to comply with NPDES Construction Storm Water General Permit requirements.
  - f. Failure to comply with all applicable statutes relating to pollution of the waters of the state.
  - g. Exceeding the maximum exposed surface area for excavation of 18 Acres without written request for permission and written approval.
  - h. Failure to comply with wildlife species-specific conservation conditions.
  - i. Failure to comply with the Contract.
  - j. Failure to comply with the Engineers directives.

### **B. SWPPP Deficiency Notification**

1. The Engineer will document and direct the Contractor to correct deficiencies.
2.
  - a. The Contractor shall commence correcting deficiencies, provide adequate equipment and personnel, and diligently pursue correcting deficiencies without cessation until all deficiencies have been corrected.
  - b. The count of Working Days and/or Calendar Days will continue during the time period that corrective work is being performed.
  - c. Delays to the project as a result of the Contractor conducting corrective actions for the Contract Environmental Commitments will not constitute a valid reason for an extension of the contract time allowance.

3. Deficiencies shall be corrected within seven (7) calendar days of notification or within an approved extension. When deficiencies are not corrected within seven (7) calendar days or within an approved extension, the Engineer will make a disincentive assessment to the contract as stated herein.
4.
  - a. If soil, weather, or other conditions prevent the Contractor from completing the corrective actions within seven (7) calendar days, the Contractor shall notify the Engineer in writing. The Contractor's letter shall state the reasons preventing corrective action within the time allowed. The Contractor shall propose a written Corrective Action Plan within 48 hours. Corrective work shall continue while the Corrective Action Plan is developed. The Contractor's Corrective Action Plan must contain a course of action and a timeframe for completion. If the reasons and the Corrective Action Plan are acceptable, the Engineer may extend the time in which to complete the corrective work.
  - b. The Contractor will be allowed to proceed with the plan as proposed without incurring a disincentive assessment. If all corrective work is completed within the time allowance shown in the Notification or within an approved extension, a disincentive assessment will not be imposed upon the Contractor.
  - c. Storm events or soil and weather conditions occurring on other projects, which interfere with a Contractor completing corrective actions on the project within seven (7) calendar days, will not be justification for a time extension to complete the corrective work.
5. If all corrective work identified in the Notification has not been completed at the end of the seventh (7<sup>th</sup>) calendar day after the Initial Notice Date or within an approved extension, a Shut-Down Notice will be issued on the eighth (8<sup>th</sup>) calendar day after the Initial Notice Date or on the calendar day following the last day of an approved extension.
6. All operations shall cease as of the date and time cited in the Shut-Down Notice. The Contractor shall work, exclusively, on the deficiencies until all have been corrected or as directed by the Engineer. Upon issuance of the Shut-Down Notice, a disincentive of \$500.00 per deficiency per calendar day will be assessed thru the day the corrective work is completed, inclusive.
7. The Engineer may require the Contractor to provide a written Procedures Plan that describes the process to prevent reoccurrence of deficiencies. The written Procedures Plan shall be provided within two (2) calendar days of the request. Failure to correct all deficiencies and provide a Procedures Plan may result in payments being withheld until such time that procedures are outlined.
  - a. Payment for preparing a written Procedures Plan is subsidiary to items that direct payment is made.

**C. Storm Event Restoration – Incentive and Disincentive**

1. The Department will pay "Storm Event Restoration - Incentive" when the Contractor completes the restoration work to eliminate the pollution prevention

control deficiencies within seven (7) calendar days of Notification or within an approved extension. Multiple deficiencies may be included in one notification. If the restoration work has not been completed within seven (7) calendar days after the Initial Notice or within an approved extension, payment for the item of “Storm Event Restoration - Incentive” will not be made.

2. A storm event is defined as a storm exceeding 0.50-inch of rain in a 24-hour period.
3. The Department will notify the Contractor of pollution prevention control deficiencies.
4. a. Payment for the item of “Storm Event Restoration - Incentive” may not be made when the Contractor is notified to correct pollution prevention devices not installed in accordance with the contract or the manufacturer’s recommended installation instructions.
5. If the restoration work is not completed within seven (7) calendar days or within an approved extension, a disincentive assessment of \$500.00 per deficiency per calendar day will be assessed. The disincentive assessment will begin on the eighth (8<sup>th</sup>) calendar day after the issuance of the Initial Notice Date or on the calendar day following the last day of an approved extension(s) and continue through the day that the restoration work is completed, inclusive.

**D. Method of Measurement**

1. a. “Storm Event Restoration – Incentive” will be measured by the each upon completion of restoration of all deficiencies included in a notification within the allowed time and only one payment per notification is allowed when multiple deficiencies are included on the notification.
- b. If deficiencies from multiple notifications are restored during the same restoration operation, only one (1) incentive is eligible for payment.
- c. If multiple notifications are the result of successive storm events and deficiencies are transferred to ensuing notifications, incentive payment is only eligible for the latest notification.
2. “Storm Event Restoration – Disincentive” will be measured by the calendar day in accordance with Paragraph C.5. above.

**E. Basis of Payment**

1. 

<b>Pay Item</b>	<b>Pay Unit</b>
Storm Event Restoration – Incentive	Each
Storm Event Restoration – Disincentive	Calendar Day
2. All equipment, materials, etc. used in the restoration work will be paid for in accordance with Division 800 of the Standard Specifications.

3. Payment is full compensation for all other incidentals required to complete the restoration work included in the notification within the allowed time.

**F. Environmental Commitments – Contractor Compliance**

1. To provide payment for all plans, inspections, surveys, reports, travel, qualified inspection person's, carrion removal, and any other subsidiary activities for the work of implementing threatened and endangered species commitments, temporary erosion control or any other environmental commitments prescribed in the contract.
2. Multiple visits to the project may be required to comply with environmental commitments prescribed in the contract.

**G. Method of Measurement**

1. No measurement is required.

**H. Basis of Payment**

1.

<b>Pay Item</b>	<b>Pay Unit</b>
Environmental Commitments – Contractor Compliance	Lump Sum
2. Partial payments will be made as follows:
  - a. The Department will pay 50 percent of the total amount bid for the item Environmental Commitments – Contractor Compliance within seven (7) calendar days after the Notice to Proceed Date.
  - b. Upon completion of 50 percent of the Original Contract Amount, the Department will pay 30 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
  - c. Upon completion of 75 percent of the Original Contract Amount, the Department will pay the remaining 20 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
  - d. Failure to comply with any or all of the contract requirements, included for payment under the item of Environmental Commitments – Contractor Compliance, will preclude all payment for the item, including any previous payment.
3. Payment is full compensation for all work prescribed in the contract.

**I. Immediate Action Deficiencies**

1. Deficiencies that pose an imminent threat to the environment are considered an emergency situation. These deficiencies will be identified in the Immediate Action Deficiencies Section of the Environmental Commitment Deficiency Notification Form. The corrective work for Immediate Action Deficiencies shall begin immediately and continue without cessation until completed.
2. The Engineer will issue a shut-down notice. All work on the contract shall cease until the corrective work has been completed. The Engineer may allow the Contractor to continue working in areas unaffected by the Immediate Action Deficiency, provided corrective actions are being actively performed on the deficiency.
3. Immediate Action Deficiencies are not eligible for an incentive payment.
4. The Contractor will be assessed a disincentive assessment of \$1,000.00 per deficiency per calendar day for failure to begin corrective actions or failing to continue to completion as directed by the Engineer or by the regulatory agency with jurisdiction.
5. Examples of Immediate Action Deficiencies include but are not limited to:
  - a. Threatened & Endangered Species habitat protection deficiencies
  - b. USACE Section 404 Permit Noncompliance
  - c. Petroleum Spills/Tank Leakage
  - d. Hazardous Material Spills

**J. Rights Reserved**

1. The Department reserves the right to initiate and perform corrective action on any deficiencies which result from the Contractors' actions, inactions, or for failure to comply with the NPDES Construction Stormwater General Permit, USACE Section 404 Permit, or any other applicable permit.
2. The Contractor shall be liable to the Department for any and all costs incurred by the Department for corrective actions taken by the Department.
3. It is expressly understood that the provisions of this specification shall not relieve the Contractor of their responsibilities nor shall it relieve the Surety of its obligation for and concerning any just claim.
4. The Contractor shall indemnify and save harmless the Department and all of its representatives from any and all actions or claims brought because of the Contractor's actions, inactions, or for failure to comply with the NPDES Construction Storm Water General Permit, USACE Section 404 Permit, or any other applicable permit.

## **HAZARDOUS MATERIALS MANAGEMENT (2-1-1217)**

### **Description**

This work shall consist of minimizing the exposure of the environment, including waters of the state, to hazardous materials. This specification also includes the requirements for clean-up of releases of hazardous materials.

### **Material Requirements**

1. Prior to beginning work on the project, the Contractor shall prepare a Spill Prevention and Control Plan (SPCP) that clearly states measures to prevent a spill, contain a spill, clean up a spill, dispose of contaminated materials and train personnel to prevent and control spills. The plan shall include the notification contacts, as well as the processes and timeframes to address the situation in the event that a spill occurs. The following shall be included in the plan:
  - a. A site plan showing locations for loading of equipment and materials, storage of equipment and materials, equipment fueling and wash areas, portable toilet locations and waste disposal areas.
  - b. Descriptions of the following that may be used on projects:
    - i. Best Management Practices (BMPs) for secondary containment.
    - ii. Description of spill response equipment and materials, including safety and clean up equipment.
    - iii. Preventative inspection and maintenance techniques for equipment to minimize leaks.
    - iv. Procedures for filling tanks and equipment to prevent spills.
    - v. Procedures for containing, diverting, isolating and cleaning up a spill.
    - vi. Procedures and BMPs to be administered at bridge and culvert sites to ensure that hazardous materials do not runoff.
      - (1) When water is present, immediate action to contain and remediate a spill is required.
      - (2) The Contractor shall notify the NDOT Project Manager and NDEQ upon release of any quantity of material to waters of the state. The NDOT Project Manager will notify the NDOT Environmental Section upon notification of a release.
    - vii. Spill training agenda and materials for the Contractor's staff and subcontractors.
  - c. Identify individuals responsible for implementing the plan.

- d. Specify how and when to notify appropriate authorities such as Nebraska Department of Environmental Quality and Nebraska State Patrol.
2. The Contractor shall provide and maintain a spill kit with appropriate materials to clean up minor spills on site as described in the Spill Prevention and Control Plan. A minor spill is defined as a release that is less than the reportable quantity for a given material and not entering waters of the state.
3. Material Safety Data Sheets (MSDS) shall be maintained on site for all hazardous materials being used or stored for the project. The MSDS Sheets shall contain reportable quantities and spill response information.

### **Construction Methods**

1. The Contractor shall store paints, solvents, pesticides, petroleum products, and other hazardous materials in areas with secondary containment.
2. Hazardous materials storage, including portable toilets, shall be restricted to specific areas away from:
  - a. vehicular traffic
  - b. restricted areas shown on the plans
  - c. waters of the state, including wetlands (50 feet minimum distance)
  - d. Wellhead Protection Areas, unless designated in a Wellhead Protection Plan that has been approved by the local authority.
3. The Contractor shall inspect hazardous material containers weekly to ensure that all containers are clearly identified and that no leaks are present.
4. The Contractor shall inspect the site weekly to ensure that cleanup procedures are posted and that a spill kit is adequately stocked and readily available.
5. The Contractor shall verify and update the SPCP site maps as necessary during inspections to accommodate changes in the site.
6. A spill kit shall be readily available, in close proximity and appropriately stocked when applying petroleum based or other hazardous materials to bridge and culvert sites.
7. The Contractor shall develop, implement and maintain a training program regarding hazardous materials management. Training of the Contractor's staff and subcontractors shall be conducted to ensure that workers are knowledgeable of the procedures, materials and equipment outlined in the SPCP. The Contractor shall maintain a database of individuals that have been trained.
  - a. Specific hazardous materials and their handling procedures shall be discussed during safety briefings.

8. The Contractor shall maintain and provide to the Project Manager, upon request, a record of all spills occurring on site. This record shall include:
  - a. The circumstances leading to the spill
  - b. The date of the release
  - c. Measures taken to resolve the incident
  - d. Measures taken to prevent a reoccurrence
9. The Contractor shall follow NDEQ notification procedures for all spills in excess of a reportable quantity as defined by NDEQ Title 126 or the products MSDS Sheets. The NDOT Project Manager will notify the NDOT Environmental Section.
10. The Contractor shall follow all local, state and federal regulations associated with the release and/or cleanup, including disposal of the hazardous material.

#### **Method of Measurement and Basis of Payment**

1. Direct payment will not be made for work associated with Hazardous Materials Management, but is considered subsidiary to the items for which direct payment.
2. The Contractor shall solely bear all penalties and costs associated with the containment, cleanup, remediation and disposal of material associated with a spill.

### **ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT DEFLECTOMETER (LWD) SCOPE (2-2-1217)**

This test method covers the in-place measurement of deflection and moisture content of Class III embankments, subgrade preparation, granular fill and backfill for acceptance testing on Nebraska Department of Transportation Projects. Refer to Subsection 205.03 of the NDOT Standard Specifications for Highway Construction for a definition of Class III embankments. Refer to NDOT Test Method T 2835 for the proper operation of the LWD.

The deflection test measurement shall be the average measured deflection of the fourth, fifth, and sixth drops of the falling weight of the LWD. The first three drops are to be used to seat the LWD.

The Deflection Target Value (DTV) is the deflection value of each soil determined by using a test strip or from correlation with the Nebraska Group Index for an individual Soil.

#### **Option 1**

##### **A. Determination of DTV using a Test Strip**

1. A test strip shall be constructed for each soil type to determine the deflection target value.

2. A new test strip shall be constructed when there is an observed change in material or as determined by the Engineer.
3. The test strip dimensions for roadway embankment and subgrades shall have a minimum length of 200 feet and a width equal to the embankment or roadway. The total thickness shall be no less than 6 inches for roadway subgrade and no less than 1 foot and no more than 3 feet for roadway embankment.
4. The test strip dimensions for trenches, culverts, and structures shall have a minimum length of 10 feet and a width equal to that of the excavation. The total thickness shall be no less than 1 foot and no more than 3 feet.
5. The optimum moisture of fine-grained soils shall either be determined in the NDOT Branch Lab or Central Lab, and shall be based on a correlation with the Plastic Limit or determined from AASHTO T-99. A 10-lb sample of proposed material shall be submitted to the NDOT Branch Lab or Central Lab a minimum of 14 days prior to grading operations.
6. The moisture content for granular soils shall be “as necessary” to achieve proper compaction.
7. The moisture content limits of the soil shall follow the requirements provided in Table 1.
8. The test strip area construction shall be incidental to the embankment construction.
9. The testing rate during the test strip construction is provided in Table 2.

**Table 1 - Moisture Requirements**

Location	Soil Type	Depth Below Finished Subgrade	Minimum %	Maximum %
Soil materials receiving concrete pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -3 Opt. -3 **	Opt. +2 Opt. +2 **
Soil materials receiving flexible pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -2 Opt. -3 **	Opt. +1 Opt. +2 **
Soil materials receiving gravel surfacing	All materials	All Depths	**	**
Subgrade prep. Shoulder subgrade prep (concrete pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -3 **	Opt +2 **
Subgrade prep. Shoulder subgrade prep (flexible pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -2 **	Opt +1 **
Stabilized Subgrade	-	-	See Specifications	
Granular Structural Fill (MSE Walls, bridges, culverts, et.)	Granular	All Depths	**	**

\*\* Moisture as necessary to obtain proper compaction. The moisture target value for granular materials shall be established in the field by the Contractor during the compaction process. Once established the target moisture shall not vary by more than  $\pm 2\%$ .

**Table 2 - Test Strip Testing Rate**

Material Location	Minimum Testing Rate
Roadway embankment and subgrade	3 tests/ pass*
Trenches, culverts, and miscellaneous structures	1 test / pass*

\* Number of passes with compaction equipment as described in paragraph 13c of Subsection 205.03 of the NDOT Standard Specifications for Highway Construction.

## **B. Test Strip Construction and Testing**

1. Prior to placing the fill material for the test strip, the subgrade shall be scarified and re-compacted.
2. The fill material shall be placed with a lift thickness no greater than 8 inches uncompacted.
3. The test strip shall be constructed with uniform material and moisture content, and compaction; until it meets the requirements of numbers 3 or 4 of Section A of this provision.
4. The deflection target value is obtained when:
  - i. The moisture content is within the acceptable range.

- ii. The average of the deflection test measurements for three consecutive passes of compaction equipment does not change by more than 10% with additional compaction. The DTV shall be based on the lowest average deflection test measurement from these passes.
- 5. A 10-lb sample of the test strip material shall be submitted to the NDOT Branch Lab or Materials and Research Soil Lab for index testing.
- 6. The DTV shall be re-evaluated when:
  - i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection test measurements are less than 0.80 of the DTV).
  - ii. Failing test results are consistently occurring and adequate compaction is observed.

### **Option 2**

#### **C. Determination of Deflection Target Values based on the Nebraska Group Index (NGI)**

- 1. Prior to construction a 10-lb bag of representative material shall be submitted to the nearest NDOT Branch Lab or Materials and Research Soil Lab for each different soil type no less than 21 days prior to grading operations.
- 2. From the laboratory testing NDOT will determine the Nebraska Group Index (NGI) for each soil type submitted and provide a correlated minimum DTV and optimum moisture content.
- 3. If no correlation data is available for an individual NGI, a test strip shall be used to determine the DTV as discussed in parts A and B in this provision.
- 4. The DTV shall be re-evaluated when:
  - i. Deflection test measurements are consistently less than the DTV. (More than 20% of the deflection test measurements are less than 0.80 of the DTV).
  - ii. Failing test results are consistently occurring and adequate compaction is observed.

### **Acceptance Testing**

- 1. The Deflection Target Value for use as acceptance testing shall be:
  - DTV  $\leq$  1.10 x average deflection value determined from Option 1, Part B, of this provision
  - DTV  $\leq$  Correlated DTV determined from the NGI correlation, Option 2, Part C

2. The testing frequency for moisture and deflection shall follow the NDOT Materials Sampling Guide.
3. The moisture content of soil shall be performed using NDOT's approved equipment and methods. Approved equipment includes: 1) hot plates, stove, or microwave, 2) Speedy Moisture Method, or 3) Laboratory oven method.
4. Moisture content results shall be reported to the nearest tenth of a percent.

### **WORK ZONE TRAFFIC CONTROL SIGNS (4-3-1217)**

The Department has adopted the FHWA 2009 Manual of Uniform Traffic Control (MUTCD) and the 2011 Nebraska Supplement to the MUTCD as the official guidance for work zone traffic control signs. Many work zone traffic control signs have been revised, redesigned, or replaced in the 2009 MUTCD (and 2011 Nebraska Supplement). Accordingly, all work zone signs shall comply with the following:

- 1 - All signs, regardless of age, shall meet the design standards of the 2009 MUTCD (and 2011 Nebraska Supplement).

### **TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES (4-3-1018)**

Paragraph 19. of Subsection 422.04 in the Standard Specifications is void.

### **ASPHALTIC CONCRETE PAVEMENT SMOOTHNESS (5-7-0518)**

Paragraph 14.b. of Subsection 502.04 in the Standard Specifications is void and superseded by the following:

- b. Pavement within 50 feet of the following locations:
  - (1) At newly constructed expansion joints within the asphaltic concrete constructed as part of the project.
  - (2) At transverse joints that separate the pavement from an approach slab to a bridge deck or existing pavement not constructed or overlaid under the contract.

Subsection 502.06 is amended to include the following:

6. Corrective work atop asphaltic concrete that overlies a Bridge Deck Waterproofing Membrane shall be limited to only the correction of bumps and dips as defined in Paragraph 15. of Subsection 502.04 and in Paragraphs 1.b. and 1.c. of Subsection 502.05. Surface correction to improve IRI alone is not allowed without the approval of the Engineer.

**ASPHALTIC CONCRETE  
(Cold Weather Asphaltic Concrete Placement)  
(5-8-1118)**

Table 503.03 in Subsection 503.04 in the Standard Specifications is void and superseded by the following:

**Table 503.03**

<b>Cold Weather Asphaltic Concrete Placement</b>	
<b>Lift Thickness</b>	<b>Minimum Surface Temperature</b>
1 inch (25 mm) or less	50°F (10°C)
Greater than 1 inch (25 mm) and Less than 2 inches (50 mm)	45°F (7°C)*
2 to 3 inches (50 to 75 mm)	37°F (3°C)*
Greater than 3 inches (75mm)	35°F(2°C)*

**\* 32° F (0° C) when a warm mix additive is used in accordance with the contract.**

**COLD MILLING CLASS 3 &  
COLD MILLING CLASS 5**

Paragraph 8.a. of Subsection 510.04 of the Standard Specifications is void and superseded by the following:

Remaining salvaged bituminous material produced from the cold milling operation not used in the production of asphaltic concrete shall become the property of the Contractor and removed from the project.

Amend Subsection 510.05 of the Standard Specifications to provide for the measurement of Cold Milling Class 3 in equivalent stations. Equivalent stations are defined as being the actual number of square feet of milling divided by 2400.

### **ASPHALT PATCHING OF TRANSVERSE CRACKS**

Transverse cracks shall be patched when the depression exceeds 1.5 inches.

Transverse cracks shall be patched prior to Cold Milling Class 3. Transverse crack patching shall consist of milling a 12" to 24" wide by 6" deep trench. The trench shall be back filled in two even lifts and compacted by a jumping jack compactor or tamping rammer. Patching practices may be altered as directed by the Engineer. The milling of transverse cracks shall be measured and paid for as "Rental of Skid Loader, Fully Operated". If the Contractor elects to use a wheel saw for removal then the saw shall have depth control.

### **CONSTRUCTING ASPHALTIC CONCRETE CURB**

Constructing Asphaltic Concrete Curb shall be at locations identified by the Engineer. The pay item "Constructing Asphaltic Concrete Curb" shall include removal of the existing asphaltic curb and the removal material shall become property of the Contractor and removed from the project.

**TABULATION OF CORES  
(FOR INFORMATION ONLY)**

Location	Field Depth inches	Remarks
		Asphaltic Concrete = AC Bituminous Sand = BS Sand Base found below cores
<b>State Rec Road Lake McConaughy</b>		
41 1545 18 101 4634 92	2.5 AC / 2.25 BS	
41 1532 01 101 4544 98	2.5 AC / 4.5 BS	
41 1508 28 101 4511 58	2.75 AC / 2 BS	
41 1510 62 101 4454 78	2.5 AC / 4.25 BS	
41 1517 30 101 4435 66	2.25 AC / 3.75 BS	
41 1508 11 101 4431 43	3.0 AC / 3.75 BS	
41 1509 57 101 4348 20	3.75 AC / 4 BS	
41 1511 71 1014346 97	2.75 AC / 3.5 BS	
41 1508 12 101 4302 77	2.5 AC / 2.5 BS	Broke in 2 pieces
41 1506 81 101 4212 71	2.5 AC / 3 BS	
41 1515 61 101 4123 80	7 AC	
41 1442 42 101 4044 39	5 AC / 4 BS	

**PRESERVATION OF TREES  
(8-4-1217)**

Paragraph 3 of Subsection 107.09 is amended to include the following:

Trees are an asset to the roadside corridor and shall be protected from immediate and long term damage such as trunk scarring, soil compaction, injury or destruction of roots and all forms of damage from vehicles, equipment or materials too close to the trees.

“No materials, vehicles or equipment shall be stored or parked within 25 feet of existing trees 4” caliper or larger, whether standing alone or in groups, throughout the length of the project.”

The Contractor shall protect from disturbance or damage, all trees as described above by installing adequate protection for all trees and tree groupings. Within the interchanges, protection shall be either snow fence, orange barrier fence or caution tape, all supported on metal posts, to prevent parking or storage of materials within these sensitive areas. This protection will not be paid for separately but considered the duty of the Contractor to fulfill the requirements described in Subsection 107.09 of the Standard Specifications and this special provision.

All materials used to establish protection for the trees shall remain the property of the Contractor and shall be removed by the Contractor at the end of the contract or as directed by the Engineer.

**PERFORMANCE GRADED BINDER**

The Performance Graded Binder to be used on this project shall be PG Binder 58V-34 supplied by a Certified Supplier.

**PERFORMANCE GRADED BINDER  
(10-1-0318)**

Table 1029.03 of Subsection 1029.03 in the Standard Specifications is void and superseded by the following:

**Table 1029.03**  
**PG + Pay Factor Table <sup>1</sup>**

<b>AASHTO T350 Multiple Stress Creep Recovery (MSCR) @ 58°C Test and Specifications</b>	<b>Test Results</b>	<b>Pay Factor</b>
AASHTO M332 Performance Grade 58H-34 Average % Recovery @ 3.2 kPa Min. 30%	> 29	1.00
	29	0.95
	28	0.90
	27	0.85
	< 27	0.70 or Reject
AASHTO M332 Performance Grade 58V-34 Average % Recovery @ 3.2 kPa Min. 55%	> 54	1.00
	54	0.95
	53	0.90
	52	0.85
	< 52	0.70 or Reject
AASHTO M332 Performance Grade 58E-34 Average % Recovery @ 3.2 kPa Min. 75%	> 74	1.00
	74	0.95
	73	0.90
	72	0.85
	< 72	0.70 or Reject

<sup>1</sup> If a lot sample has more than one test that results in a reduced pay factor (less than 1.00) from either or both of the above Pay Factor Tables, the single largest pay factor reduction will be the one used in determining the lot pay factor. If a lot sample passes all testing (1.00 or greater), and one or more test pay factors are 1.05, the pay factor of 1.05 will be the one used in determining the lot pay factor.

## **HYDRATED LIME FOR ASPHALT MIXTURES (10-3-1217)**

### **1. General**

Hydrated lime will be added to all aggregates (at the Contractor's option, limestone may be excluded) used for asphalt mixtures except Asphaltic Concrete used for Temporary Surfacing, and Asphaltic Concrete Type SPS, and SPL. Hydrated lime will be added to pre-moistened aggregates whether it is used directly into the mix or stockpiled for marinating purposes. The application of moisture and hydrated lime to the aggregates along with equipment calibration and procedures to prevent any "dusting" shall be documented and approved in the Contractor's Quality Control (QC) Plan.

### **2. Material Requirements**

The lime shall meet the chemical and physical properties defined in AASHTO M 303 for Type I - High calcium-hydrated lime, or meet the requirements of ASTM 1097 for Type S Hydrated Lime.

The hydrated lime being used, whether for mix design or plant mix production, shall be stored in an enclosed container and must be used within 90 days. Stockpiles marinating shall also be used within 90 days. Lime that is stored over 90 days in a protected storage silo environment may be submitted for chemical analysis to verify that it meets the specification for use in the mix.

Water shall conform to the requirements of Section 1005.

### **3. Construction**

Prior to the addition of hydrated lime the aggregates shall have a minimum moisture content of 3% by weight of aggregate. The surface of the aggregate shall be uniformly dampened by water.

If additional moisture is required it shall be added at the entry end of an enclosed pug mill mixer and prior to the addition of hydrated lime.

Hydrated Lime shall be added at a rate of 1.25 percent by weight of virgin aggregate, including the weight of the limestone.

### **4. Equipment**

The addition of lime shall be plant controlled, and blended with an enclosed twin-shaft pug mill with a production capacity rating that exceeds the aggregate feed rate. It shall be capable of effective mixing in the full range of asphaltic concrete production rates.

The pug mill set up shall be located in the system at a location where the mixed material can be readily inspected on a belt prior to entry into the drum.

The pug mill shall be designed such that the mixture of aggregate and hydrated lime is moved in a near horizontal direction (within 20 degrees of horizontal) by the mixing paddles without the aid of conveyor belts for a distance of at least three feet (900 mm). Mixing devices which permit the mixture of aggregate and hydrated lime to fall through the mixing blades onto a belt or chute are not acceptable.

A positive signal system and a limit switch device shall be installed in the plant at the point of introduction of the hydrated lime. The positive signal system shall be placed between a metering device and the drum plant, and utilized during production whereby an alarm is activated; alerting the plant that the hydrated lime is not being introduced into the mixture.

The hydrated lime storage silo shall have enough capacity for continuous production. The silo shall be replenished by pneumatic delivery from road tankers at a pressure that will not create dusting. Hydrated lime will be dispensed from the silo into the pug mill by a conventional vane feeder or a load cell pod system.

The mechanism for adding moisture to the aggregate will be configured and located to insure that all virgin aggregate is uniformly coated with moisture prior to the lime application.

**5. Sampling and Testing**

Hydrated lime shall be certified by the supplier stating its compliance to the specifications.

A physical inventory of hydrated lime usage will be required during mix production. A daily silo inventory, noting "beginning weight", "weight added during the day's production", and "end of day weight", will be recorded and made available for review by the Engineer. When a weigh pod system is used, an accumulative accounting method shall be used to calculate and review lime addition rates throughout production. When calculations indicate a hydrated lime usage of  $\pm 0.15$  percent from the design percentage the Contractor shall assume the responsibility to cease production and recalibrate the system prior to resuming mix production. Any asphaltic concrete placed having 0.15 percent below the design percentage shall be removed and replaced at no cost.

The percent of moisture shall be determined and documented: 1) from belt samples or 2) from stockpile samples, a minimum of once per day.

**6. Mixture QC and Verification Testing**

During an ignition oven burn off, lime will combine with the sulfur in the binder and produce ash. Therefore, when mix containing hydrated lime is being designed and produced a correction factor to the ignition oven burn off result of +0.30% shall be used. This correction factor shall be added to the ignition oven binder content reading in order for the actual binder content to be determined.

**7. Method of Measurement:**

Hydrated Lime shall be measured for payment by the unit of each for each ton of hot mix asphalt used and incorporated into the project, or for State Maintenance Patching.

Water applied shall not be measured and paid for but shall be considered subsidiary to the item "Hydrated Lime/Warm Mix Asphalt".

**8. Basis of Payment:**

Lime, measured as provided herein and incorporated into the project, shall be paid for at the contract unit price per each for the item "Hydrated Lime/Warm Mix Asphalt". Lime measured as provided herein and used for State Maintenance Patching shall be paid for at the contract unit price per each for the item "Hydrated Lime/Warm Mix Asphalt for State Maintenance Patching". This price shall be full compensation for furnishing, delivering, hauling, storing, all labor, equipment, tools and incidentals necessary to complete the work.

**HYDRATED LIME SLURRY FOR ASPHALT MIXTURES  
(10-3-1217)**

- 1. General** — The Contractor will have the option of using Hydrated Lime Slurry For Asphalt Mixtures or Hydrated Lime For Asphalt Mixtures. Hydrated lime slurry will be added to all aggregates (at the Contractor's option, limestone may be excluded) used for

asphalt mixtures except Asphaltic Concrete used for Temporary Surfacing, and Asphaltic Concrete Type SPS and SPL. Hydrated lime slurry will be added to aggregates whether it is used directly into the mix or stockpiled for marinating purposes. The application of hydrated lime slurry to the aggregates along with equipment calibration and procedures shall be documented and approved in the Contractor's Quality Control (QC) Plan.

2. **Material Requirements** — The lime shall meet the chemical and physical properties defined in AASHTO M 303 for Type I - High calcium-hydrated lime, or meet the requirements of ASTM 1097 for Type S Hydrated Lime.

The dry hydrated lime being used, whether for mix design or plant mix production, shall be stored in an enclosed container and must be used within 90 days. Stockpiles marinating shall also be used within 90 days. Hydrated lime (dry or slurry) that is stored over 90 days in a protected storage silo or slurry tank may be submitted for chemical analysis to verify that it meets the specification for use in the mix.

Water shall conform to the requirements of Section 1005.

3. **Construction** — Hydrated Lime shall be added at a rate of 1.25 percent by weight of virgin aggregate, including the weight of the limestone.
4. **Equipment** — The addition of lime shall be plant controlled, and blended with an enclosed twin-shaft pug mill with a production capacity rating that exceeds the aggregate feed rate. It shall be capable of effective mixing in the full range of asphaltic concrete production rates.

The pug mill set up shall be located in the system at a location where the mixed material can be readily inspected on a belt prior to entry into the drum.

The pug mill shall be designed such that the mixture of aggregate and hydrated lime is moved in a near horizontal direction (within 20 degrees of horizontal) by the mixing paddles without the aid of conveyor belts for a distance of at least three feet (900 mm).

Mixing devices which permit the mixture of aggregate and hydrated lime to fall through the mixing blades onto a belt or chute are not acceptable.

A positive signal system and a limit switch device shall be installed in the plant at the point of introduction of the hydrated lime. The positive signal system shall be placed between a metering device and the drum plant, and utilized during production whereby an alarm is activated; alerting the plant that the hydrated lime is not being introduced into the mixture.

A minimum of two hydrated lime slurry tanks shall be used for blending and supply. Slurry shall be drawn for production from only one tank at a time. The hydrated lime slurry tanks shall have enough capacity for continuous production.

Hydrated lime slurry shall be dispensed from a slurry tank into the pug mill by a pressure regulated spray system having an electronic flow measurement system that has been calibrated to insure the proper application rates will be provided. Certificate of Calibration for the spray bar system should be provided by the Contractor with the calibration being performed by a third party every 12 months (minimum) or at the Engineer's request.

The electronic flow measurement system shall automatically record the flow rate of the lime slurry being fed to the pug mill. The data recorder system shall be capable of recording the flow rate (in gallons per minute) at intervals of not more than 5 minutes and shall have the capability of calculating the volume of lime slurry used each day, from each slurry tank, and shall be capable of printing a summary of the daily lime slurry usage for each tank. This printout of the daily lime slurry volumes shall be presented to the NDOT representative at the end of each day's production.

- 5. Blending and Supply Hydrated Lime Slurry** — The Contractor shall determine the target hydrated lime slurry concentration (percent solids) that will be used to produce the asphalt mixture. This target concentration value shall be provided to the Engineer prior to production of the asphalt mixture and shall not be less than 30 percent. The target concentration value shall not be modified without the approval of the Engineer. It is the Contractor's responsibility to control the concentration of the hydrated lime slurry.

Only valid weights of dry hydrated lime shall be added to the required quantity of water to provide uniform hydrated lime slurry having a dry solids content within  $\pm 0.5$  percent of the Contractor's target value. Water or dry hydrated lime shall not be added to a tank that is actively supplying hydrated lime slurry to the pug mill. Hydrated lime slurry shall not be drawn from a tank that is not completely blended in accordance with the manufacturer's recommendations.

The hydrated lime slurry in the active supply tank shall be agitated prior to and during production in accordance with the manufacturer's recommendations.

Dry hydrated lime shall be transferred at a pressure that will not create dusting.

- 5.1** If individual hydrated lime slurry tanks are dedicated to only blending or supply, then thoroughly mixed hydrated lime slurry may be added from the blending tank(s) to the supply tank during production, provided the concentrations are within  $\pm 0.5$  percent.
- 5.2** If the hydrated lime slurry tanks are used for both blending and supply, the tanks shall be plumbed such that hydrated lime slurry can be supplied to the pug mill from any of the blending/supply tanks without disruption of the slurry supply.

- 6. Sampling and Testing** — Hydrated lime shall be certified by the supplier stating its compliance to the specifications.

The concentration of the lime slurry shall be controlled within  $\pm 0.5$  percent of the target hydrated lime slurry concentration (percent solids). The concentration of the hydrated lime shall be determined in accordance with Section 6.1. It is the Contractor's responsibility to halt production to make adjustments when the concentrations fall out of compliance.

The concentration of the lime slurry shall be determined and recorded by the Contractor immediately following blending each batch of lime slurry for the project. These records shall include date and time of test, sample collection information, and the unit weight, temperature and concentration of slurry. These records shall be made available to the Engineer upon request.

A physical inventory of hydrated lime usage will be required during mix production. This inventory shall be used to verify the lime application rate, and for payment of the hydrated lime. The concentration of the lime slurry shall be determined and recorded by the Contractor at the beginning and at approximately the mid-point of each day's production. The hydrated lime slurry samples shall be collected from the supply line leading to the pug mill. These records shall include date and time of test, sample collection information, and the unit weight, temperature and concentration of slurry. These records shall be presented to the NDOT representative at the end of each day's production.

When calculations indicate that the application rate of "dry" hydrated lime to the aggregate is  $\pm 0.15$  percent from the design percentage the Contractor shall assume the responsibility to cease production and recalibrate the system prior to resuming mix production. Any asphaltic concrete placed having a "dry" hydrated lime application rate (applied to aggregate) of 0.15 percent below the design percentage shall be removed and replaced at no cost.

**6.1** The Contractor shall determine the solids content (concentration) of the hydrated lime slurry using Table 1, Table 2 and the Slurry Worksheet. The Contractor shall provide and use the standard weight per 83.205-ml Gardner cup meeting the requirements of ASTM D 244.

After a batch of lime slurry has been produced, use the following procedures to verify that the intended percent solids have been achieved.

1. Fill a quart container 3/4 full with lime slurry. Samples can be taken from ports located at either end of the vessel. Do not use glass.
2. Weigh a dry, empty Gardner (WPG) cup and cover to the nearest 0.01 of a gram. Record this weight.
3. Shake the lime slurry sample well. Immediately fill the WPG cup.
4. Tap the WPG cup lightly on an immovable object to allow for the escape of air bubbles.
5. Slowly turn the cap of the WPG cup until it is completely seated. If the cover is pushed on quickly, lime slurry will squirt out through the hole in the center. Be sure to point the top of the WPG away from you (or others) while putting on the cap.
6. Hold the WPG cup by the top and bottom with thumb and forefinger. Be sure to cover the hole in the cap.
7. Rinse the WPG cup under running water to remove any lime from the outside of the cup.
8. Dry the outside of the cup thoroughly.
9. Weigh the dry, filled WPG cup to the nearest 0.01 of a gram. Record this weight.

10. Promptly remove the cover, insert thermometer and record the temperature.
  11. Subtract the empty cup weight (from step 2) from the filled cup weight (step 9) and record the difference.
  12. Multiply the difference by 0.1. This number is the density (lbs./gallon) of the lime slurry. Record this number.
  13. Look up the temperature correction in Table 2 and record the value.
  14. Multiply the slurry density times the temperature correction value. This is the adjusted slurry density. Record the adjusted slurry density on the slurry worksheet.
  15. Find the nearest density to that recorded above on the "Slurry Solids Chart" on Table 1, Slurry Solids Chart - 24 degrees C. The corresponding number is the percent solids (concentration) of the lime slurry sample. Record on worksheet.
7. **Mixture QC and Verification Testing** — During an ignition oven burn off, lime will combine with the sulfur in the binder and produce ash. Therefore, when mix containing hydrated lime is being designed and produced a correction factor to the ignition oven burn off result of +0.30% shall be used. This correction factor shall be added to the ignition oven binder content reading in order for the actual binder content to be determined.
8. **Method of Measurement** — Hydrated Lime shall be measured for payment by the unit of each for each ton of hot mix asphalt used and incorporated into the project, or for State Maintenance Patching.
- Water applied shall not be measured and paid for but shall be considered subsidiary to the item "Hydrated Lime/Warm Mix Asphalt".
9. **Basis of Payment** — Lime, measured as provided herein and incorporated into the project, shall be paid for at the contract unit price per each for the item "Hydrated Lime/Warm Mix Asphalt". Lime measured as provided herein and used for State Maintenance Patching shall be paid for at the contract unit price per each for the item "Hydrated Lime/Warm Mix Asphalt for State Maintenance Patching". This price shall be full compensation for furnishing, delivering, hauling, storing, all labor, equipment, tools and incidentals necessary to complete the work.

**Table 1, Page 1**  
**Slurry Solids Chart – 24°C**

<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>
9.108	15.1	9.402	20.1	9.715	25.1	10.050	30.1
9.114	15.2	9.406	20.2	9.722	25.2	10.057	30.2
9.120	15.3	9.414	20.3	9.728	25.3	10.064	30.3
9.128	15.4	9.420	20.4	9.735	25.4	10.071	30.4
9.131	15.5	9.426	20.5	9.741	25.5	10.078	30.5
9.137	15.6	9.433	20.6	9.748	25.6	10.085	30.6
9.143	15.7	9.439	20.7	9.755	25.7	10.092	30.7
9.148	15.8	9.445	20.8	9.761	25.8	10.099	30.8
9.154	15.9	9.451	20.9	9.768	25.9	10.106	30.9
9.160	16.0	9.457	21.0	9.774	26.0	10.113	31.0
9.166	16.1	9.463	21.1	9.781	26.1	10.120	31.1
9.171	16.2	9.469	21.2	9.787	26.2	10.127	31.2
9.177	16.3	9.476	21.3	9.794	26.3	10.134	31.3
9.183	16.4	9.482	21.4	9.800	26.4	10.141	31.4
9.189	16.5	9.488	21.5	9.807	26.5	10.148	31.5
9.195	16.6	9.494	21.6	9.814	26.6	10.155	31.6
9.200	16.7	9.500	21.7	9.820	26.7	10.163	31.7
9.206	16.8	9.506	21.8	9.827	26.8	10.170	31.8
9.212	16.9	9.513	21.9	9.833	26.9	10.177	31.9
9.218	17.0	9.519	22.0	9.840	27.0	10.184	32.0
9.224	17.1	9.525	22.1	9.847	27.1	10.191	32.1
9.230	17.2	9.531	22.2	9.853	27.2	10.198	32.2
9.235	17.3	9.538	22.3	9.860	27.3	10.205	32.3
9.241	17.4	9.544	22.4	9.867	27.4	10.212	32.4
9.247	17.5	9.550	22.5	9.873	27.5	10.220	32.5
9.253	17.6	9.556	22.6	9.880	27.6	10.227	32.6
9.259	17.7	9.563	22.7	9.887	27.7	10.234	32.7
9.265	17.8	9.569	22.8	9.894	27.8	10.241	32.8
9.271	17.9	9.575	22.9	9.900	27.9	10.248	32.9
9.277	18.0	9.581	23.0	9.907	28.0	10.255	33.0
9.282	18.1	9.588	23.1	9.914	28.1	10.263	33.1
9.288	18.2	9.594	23.2	9.920	28.2	10.270	33.2
9.294	18.3	9.600	23.3	9.927	28.3	10.277	33.3
9.300	18.4	9.607	23.4	9.934	28.4	10.284	33.4
9.306	18.5	9.613	23.5	9.941	28.5	10.292	33.5
9.312	18.6	9.619	23.6	2.948	28.6	10.299	33.6
9.318	18.7	9.626	23.7	9.954	28.7	10.306	33.7
9.324	18.8	9.632	23.8	9.961	28.8	10.314	33.8
9.330	18.9	9.638	23.9	9.968	28.9	10.321	33.9
9.336	19.0	9.645	24.0	9.975	29.0	10.328	34.0
9.342	19.1	9.651	24.1	9.982	29.1	10.335	34.1
9.348	19.2	9.658	24.2	9.988	29.2	10.343	34.2
9.354	19.3	9.664	24.3	9.995	29.3	10.350	34.3
9.360	19.4	9.670	24.4	10.002	29.4	10.358	34.4
9.366	19.5	9.677	24.5	10.009	29.5	10.365	34.5
9.372	19.6	9.683	24.6	10.016	29.6	10.372	34.6
9.378	19.7	9.690	24.7	10.023	29.7	10.380	34.7
9.384	19.8	9.696	24.8	10.030	29.8	10.387	34.8
9.390	19.9	9.703	24.9	10.037	29.9	10.394	34.9
9.396	20.0	9.709	25.0	10.044	30.0	10.402	35.0

**Table 1, Page 2**  
**Slurry Solids Chart – 24°C**

<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>	<b>Density lbs./gal.</b>	<b>Slurry Solids %</b>
10.409	35.1	10.795	40.1	11.210	45.1	11.658	50.1
10.417	35.2	10.803	40.2	11.218	45.2	11.667	50.2
10.424	35.3	10.811	40.3	11.227	45.3	11.677	50.3
10.432	35.4	10.819	40.4	11.236	45.4	11.686	50.4
10.439	35.5	10.827	40.5	11.244	45.5	11.695	50.5
10.447	35.6	10.835	40.6	11.253	45.6	11.705	50.6
10.454	35.7	10.843	40.7	11.262	45.7	11.714	50.7
10.462	35.8	10.851	40.8	11.270	45.8	11.724	50.8
10.469	35.9	10.859	40.9	11.279	45.9	11.733	50.9
10.477	36.0	10.867	41.0	11.288	46.0	11.743	51.0
10.484	36.1	10.875	41.1	11.297	46.1	11.752	51.1
10.492	36.2	10.883	41.2	11.305	46.2	11.762	51.2
10.499	36.3	10.892	41.3	11.314	46.3	11.771	51.3
10.507	36.4	10.900	41.4	11.323	46.4	11.781	51.4
10.514	36.5	10.908	41.5	11.332	46.5	11.790	51.5
10.522	36.6	10.916	41.6	11.341	46.6	11.800	51.6
10.530	36.7	10.924	41.7	11.349	46.7	11.809	51.7
10.537	36.8	10.932	41.8	11.358	46.8	11.819	51.8
10.545	36.9	10.941	41.9	11.367	46.9	11.828	51.9
10.552	37.0	10.949	42.0	11.376	47.0	11.838	52.0
10.560	37.1	10.957	42.1	11.385	47.1	11.848	52.1
10.568	37.2	10.965	42.2	11.394	47.2	11.857	52.2
10.575	37.3	10.974	42.3	11.403	47.3	11.867	52.3
10.583	37.4	10.982	42.4	11.412	47.4	11.877	52.4
10.591	37.5	10.990	42.5	11.421	47.5	11.886	52.5
10.599	37.6	10.998	42.6	11.430	47.6	11.896	52.6
10.606	37.7	11.007	42.7	11.439	47.7	11.906	52.7
10.614	37.8	11.015	42.8	11.447	47.8	11.915	52.8
10.622	37.9	11.023	42.9	11.456	47.9	11.925	52.9
10.629	38.0	11.032	43.0	11.465	48.0	11.935	53.0
10.637	38.1	11.040	43.1	11.475	48.1	11.945	53.1
10.645	38.2	11.048	43.2	11.484	48.2	11.954	53.2
10.653	38.3	11.057	43.3	11.493	48.3	11.964	53.3
10.661	38.4	11.065	43.4	11.502	48.4	11.974	53.4
10.668	38.5	11.074	43.5	11.511	48.5	11.984	53.5
10.676	38.6	11.082	43.6	11.520	48.6	11.994	53.6
10.684	38.7	11.090	43.7	11.529	48.7	12.004	53.7
10.692	38.8	11.099	43.8	11.538	48.8	12.014	53.8
10.700	38.9	11.107	43.9	11.547	48.9	12.023	53.9
10.707	39.0	11.116	44.0	11.556	49.0	12.033	54.0
10.715	39.1	11.124	44.1	11.566	49.1	12.043	54.1
10.723	39.2	11.133	44.2	11.575	49.2	12.053	54.2
10.731	39.3	11.141	44.3	11.584	49.3	12.063	54.3
10.739	39.4	11.150	44.4	11.593	49.4	12.073	54.4
10.747	39.5	11.158	44.5	11.602	49.5	12.083	54.5
10.755	39.6	11.167	44.6	11.612	49.6	12.093	54.6
10.763	39.7	11.175	44.7	11.621	49.7	12.103	54.7
10.771	39.8	11.184	44.8	11.630	49.8	12.113	54.8
10.779	39.9	11.193	44.9	11.639	49.9	12.123	54.9
10.787	40.0	11.201	45.0	11.649	50.0	12.134	55.0

**Table 2**  
**Correction Factor to Adjust Slurry Densities for Temperature**

<b>Temp (C)</b>	<b>Factor</b>	<b>Temp (C)</b>	<b>Factor</b>
20	0.99927	61	1.01176
21	0.99944	62	1.01218
22	0.99962	63	1.01262
23	0.99981	64	1.01305
24	1.00000	65	1.01349
25	1.00002	66	1.01394
26	1.00041	67	1.01439
27	1.00063	68	1.01485
28	1.00085	69	1.01531
29	1.00109	70	1.01578
30	1.00132	71	1.01626
31	1.00157	72	1.01673
32	1.00182	73	1.01722
33	1.00208	74	1.01770
34	1.00234	75	1.01820
35	1.00261	76	1.01870
36	1.00289	77	1.01920
37	1.00318	78	1.01971
38	1.00347	79	1.02022
39	1.00376	80	1.02074
40	1.00407	81	1.02126
41	1.00438	82	1.02179
42	1.00469	83	1.02232
43	1.00501	84	1.02286
44	1.00534	85	1.02341
45	1.00567	86	1.02395
46	1.00601	87	1.02451
47	1.00635	88	1.02506
48	1.00670	89	1.02563
49	1.00706	90	1.02619
50	1.00742	91	1.02677
51	1.00779	92	1.02734
52	1.00816	93	1.02793
53	1.00854	94	1.02851
54	1.00892	95	1.02911
55	1.00931	96	1.02970
56	1.00970	97	1.03031
57	1.01010	98	1.03091
58	1.01051	99	1.03152
59	1.01092	100	1.03214
60	1.01134	101	1.03276

## Slurry Worksheet

[illegible]

## INCENTIVE PAYMENT FOR THE USE OF RECYCLED ASPHALTIC PAVEMENT (RAP) FOR ASPHALTIC MIXTURES (10-7-1217)

### General

This specification establishes a standard method for paying an incentive to use Recycled Asphaltic Pavement (RAP) in asphalt mixture types: SPH, SPS, SPR, SRM, SLX and LC. The intent of this specification is to provide an incentive for incorporating as much RAP into the asphalt mixtures as allowed by the respective mixture's specification.

### Method of Measurement

1. The RAP Incentive Payment shall be based on the actual total of asphalt production for the entire project. A RAP Incentive Payment shall be calculated for each eligible asphaltic concrete type.

2. The following formula will be used to calculate the "RAP Incentive Factor".

$$\text{RAP Incentive Factor} = [(A-B) \div 100] \times C \times D$$

Where:

- A = State's Established Percent Binder – based on gradation band.
- B = Actual Percentage of Binder – added to asphaltic mixture.
- C = Unit Bid price of Binder
- D = RAP Pay Factor

3. The State's established percent binder values ('A' values) are as follows:

Asphaltic Concrete Types	'A' Value
SPH having 0.500-inch grading band	5.2% Binder
SPS, SPL, SPR and SPR (Fine)	5.2% Binder
SLX	5.5% Binder
SPH having 0.375-inch grading band	5.8% Binder
LC	6.2% Binder
SRM	4.8% Binder

*Incentive payments will be made for only the mix types list in this table.*

4. The actual percentage of binder added to the particular asphaltic mixture ('B' value) shall be calculated as follows:

$$B = (\text{Actual Pay Tons of Binder} \div \text{Actual Pay Tons of Asphaltic Concrete}) \times 100$$

5. The Unit Bid Price of Binder ('C' value) is the established contract price for the performance graded binder type used to produce the mix for which the incentive is being calculated.

6. The RAP Pay Factor ('D' value) shall be as follows:

<b>RAP Source</b>	<b>'D' Value</b>
Contractor supplied RAP	0.50
State supplied RAP coming from an <b>OFF</b> -project source	0.35
* RAP coming from an <b>ON</b> -project source	0.15

\* RAP coming from an **ON**-project source shall be completely utilized before allowing RAP from any other source to be used in the asphalt production. An ON-project source shall be considered any asphaltic material removed on the project.

7. Contractor supplied RAP and RAP supplied from either off-project or on-project sources shall be stored, handled and used separately. Incentive payments for RAP from these three source types shall be paid separately. The Contractor may propose a RAP consumption plan that will use multiple RAP sources concurrently and will follow the utilization hierarchy (as detailed above) upon the completion of the project.
8. The Contractor has sole responsibility for determining the quality, quantity, and uniformity of the RAP material. The maintenance of any stockpiles and processing of the RAP material shall also be the sole responsibility of the Contractor.

#### **Basis of Payment**

- |    |                             |                 |
|----|-----------------------------|-----------------|
| 1. | <b>Pay Item</b>             | <b>Pay Unit</b> |
|    | RAP Incentive Payment _____ | Each (ea)       |
2. The overall RAP Incentive Payments shall be full compensation for all RAP materials and all hauling, handling and processing necessary to complete the work described in this section.
3. The overall RAP Incentive Payments – for each eligible mix type and/or RAP source – shall be the RAP Incentive Factor multiplied by the total accepted tons of asphaltic concrete in which the RAP was incorporated.
4. RAP Incentive Payment is paid for as an “established” contract unit price which is shown in the bid proposal “Schedule of Items”.
5. The actual quantity for RAP Incentive Payment will be calculated based on the Method of Measurement stated above in this provision.

### **SUPERPAVE ASPHALTIC CONCRETE (10-11-0218)**

Paragraph 8.d. of Subsection 1028.03 in the Standard Specifications is void and superseded by the following:

- d. Normally, 1 (one) sample for determination of density will be taken from each subplot at locations determined by the Engineer.

Table 1028.18 (SLX) of Subsection 1028.03 is void and superseded by the following:

**Table 1028.18 (SLX)**  
**Acceptance Schedule**  
**Air Voids –  $N_{des}$**

Air voids test results for Asphaltic Concrete Type SLX	Pay Factor	
	Moving average of four	Single test
Less than 0.5%	50% or Reject	50% or Reject
0.5% to 0.9%	50% or Reject	50%
1.0% to 1.4%	50% or Reject	95%
1.5% to 1.9%	90%	95%
2.0% to 2.4%	100%	100%
2.5% to 3.5%	102%	104%
3.6% to 4.0%	100%	100%
4.1% to 4.5%	95%	95%
4.6% to 5.0%	90%	95%
5.1% to 5.5%	50% or Reject	90%
5.6% to 6.0%	50% or Reject	50%
6.1% and over	50% or Reject	50% or Reject

**PROPOSAL GUARANTY**  
**(1-37-1217)**

As an evidence of good faith in submitting a bid for this work, the bidder shall indicate the type of bid bond applied to this project in accordance with Subsection 102.14 of the Standard Specifications.

600INFJUL19

## INDEX

<b>ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT DEFLECTOMETER</b>	
(LWD) SCOPE .....	61
<b>ASPHALT PATCHING OF TRANSVERSE CRACKS .....</b>	<b>67</b>
<b>ASPHALTIC CONCRETE</b>	
(Cold Weather Asphaltic Concrete Placement) .....	66
<b>ASPHALTIC CONCRETE PAVEMENT SMOOTHNESS .....</b>	<b>65</b>
 <b>COLD MILLING CLASS 3 &amp; COLD MILLING CLASS 5 .....</b>	 <b>66</b>
<b>CONSTRUCTING ASPHALTIC CONCRETE CURB .....</b>	<b>67</b>
<b>CONSTRUCTION DETAILS .....</b>	<b>47</b>
<b>CONSTRUCTION METHODS .....</b>	<b>49</b>
<b>CONSTRUCTION STORMWATER MANAGEMENT CONTROL .....</b>	<b>47</b>
 <b>ENVIRONMENTAL COMMITMENT DOCUMENT .....</b>	 <b>50</b>
<b>ENVIRONMENTAL COMMITMENT ENFORCEMENT .....</b>	<b>54</b>
<b>ENVIRONMENTAL COMMITMENTS .....</b>	<b>14</b>
 <b>GENERAL CONDITIONS .....</b>	 <b>3</b>
 <b>HAZARDOUS MATERIALS MANAGEMENT .....</b>	 <b>59</b>
<b>HYDRATED LIME FOR ASPHALT MIXTURES .....</b>	<b>70</b>
<b>HYDRATED LIME SLURRY FOR ASPHALT MIXTURES .....</b>	<b>72</b>
 <b>INCENTIVE PAYMENT FOR THE USE OF RECYCLED ASPHALTIC PAVEMENT (RAP) FOR</b>	
<b>ASPHALTIC MIXTURES .....</b>	<b>81</b>
<b>INFORMAL PARTNERING .....</b>	<b>12</b>
 <b>LIABILITY INSURANCE .....</b>	 <b>44</b>
<b>LIMITATION OF OPERATIONS .....</b>	<b>48</b>
<b>LOCAL PUBLIC AGENCY RESPONSIBLE CHARGE .....</b>	<b>46</b>
 <b>MEASUREMENT AND PAYMENT</b>	
(Partial Payment) .....	43
 <b>NOTICE TO BIDDERS .....</b>	 <b>45</b>
(Environmental Commitments) .....	38
 <b>PERFORMANCE GRADED BINDER .....</b>	 <b>69</b>
<b>PERMITS, LICENSES, AND TAXES</b>	
(Contractor Site Use Approval) .....	42
<b>PRESERVATION OF TREES .....</b>	<b>69</b>
<b>PROPOSAL GUARANTY .....</b>	<b>83</b>
<b>PROPOSAL GUARANTY BID BOND (BID BOND) .....</b>	<b>42</b>
 <b>REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST .....</b>	 <b>40</b>

<b>SPECIAL PROSECUTION AND PROGRESS</b>	
(Construction Signs & Barricades).....	46
(Coordination with Others).....	11
(Federal Immigration Verification System) .....	41
(General Requirements).....	11
(Milling/Asphaltic Concrete Placement).....	11
(Project Liquidated Damages).....	46
(Weight Restrictions/Asphaltic Concrete Placement).....	11
<b>STATUS OF ENVIRONMENTAL COMMITMENTS</b> .....	13
<b>STATUS OF RIGHT-OF-WAY</b> .....	10
<b>STATUS OF UTILITIES</b> .....	10
<b>STORM WATER DISCHARGES</b> .....	40
<b>STORM WATER POLLUTION PREVENTION PLAN (SWPPP)</b> .....	51
<b>SUPERPAVE ASPHALTIC CONCRETE</b> .....	82
 <b>TABULATION OF CORES</b>	
(FOR INFORMATION ONLY) .....	68
<b>TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES</b> .....	65
<b>TEMPORARY WATER POLLUTION CONTROL</b> .....	47
<b>TRAINING SPECIAL PROVISIONS</b> .....	3
<b>AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS</b> .....	10
 <b>WAGES AND CONDITIONS OF EMPLOYMENT</b>	
(Employment of Labor – Payrolls) .....	43
<b>WORK ZONE TRAFFIC CONTROL SIGNS</b> .....	65
<b>WORKER VISIBILITY</b> .....	41



Jun 13 2019 DocuSign